



HOW WE WILL PAY

CONSUMERS, CONNECTED DEVICES AND THE FUTURE OF PAYMENTS

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THE FUTURE OF PAYMENTS

IN COLLABORATION WITH PYMNTS AND VISA

JUNE 7, 2017

THIS STUDY ANSWERED THREE QUESTIONS ABOUT CONSUMERS, CONNECTED DEVICES AND PAYMENTS

CONSUMERS KEPT A ONE DAY AND SEVEN DAY DIARY AND WERE ASKED QUESTIONS ABOUT DEVICE OWNERSHIP AND USAGE

- What connected devices do consumers own today?
- How do they use them to pay?
- How might they like using them to pay in the future?

THIS STUDY USED A SAMPLE OF CONSUMERS WHO OWNED SMARTPHONES

WE RECEIVED RESPONSES FROM 2,584 U.S. CONSUMERS

- We drew a random sample of ~2600 shoppers from the United States.
- We required that each shopper had at least a smartphone in order to participate.
- We eliminated those who completed the survey in less than 4 minutes to get our panel of 2,584 respondents.
- We asked these consumers general questions about device ownership and usage, including specific connected device use cases.
- We also asked these consumers to complete a seven day and one day diary to better understand their overall purchasing patterns, and use of connected devices in support of those experiences.

THE STUDY GENERATED OVER 6 MILLION DATA POINTS AND A WEALTH OF INFORMATION ABOUT CONSUMER CONNECTED DEVICE OWNERSHIP, USAGE OF THOSE DEVICES RELATED TO PAYMENTS, INTEREST IN SPECIFIC CONNECTED PAYMENTS USE CASES, AND WHERE CONSUMERS SEE OPPORTUNITIES FOR USING CONNECTED DEVICES IN THE FUTURE TO PAY FOR THINGS.

CONNECTED CONSUMERS SEE A FUTURE WHERE CONNECTED DEVICES WILL ADD VALUE TO HOW THEY PURCHASE AND PAY

Consumers own and use a variety of connected devices – on average they own more than 4; almost a quarter – the Super Connected – have 6 or more.

- Connected consumers find the current buying and paying experience friction filled, unproductive, time-consuming and inconvenient.
- Connected consumers increasingly gravitate to buying things online, including the things usually bought in stores, e.g. home furnishings and home supplies, and would like to pay for things such as gasoline digitally, too.
- Connected consumers see the potential to use connected devices to enable a more efficient and seamless buying experience while they are going about their day to day routine: commuting, working, cleaning, cooking, and taking care of the kids.
- As appealing as that opportunity is to them, connected consumers have trouble seeing how today's connected devices could provide that seamless connected buying experience.
- Connected consumers overwhelmingly trust their bank and bankcard network to enable a connected device-enabled payment experience for them.
- Innovators have a tremendous opportunity to capitalize on the connected consumer's interest in new ways to pay.



75 PERCENT OF CONSUMERS OWN SOMETHING OTHER THAN A SMARTPHONE, COMPUTER OR LAPTOP

Who Owns What Connected Device and Why

The average consumer owns more than 4 connected devices.

- **75%** of all consumers own something other than a smartphone, computer or laptop.
- The most popular connected device after a tablet or laptop is



the video game console (47 percent), followed closely by



the activity tracker (41 percent).

- Nearly as many connected consumers own



voice activated devices (14 percent)



as smart watches (15 percent) even though voice activated devices are a relatively new device category.

The degree to which consumers buy and use these devices vary little by demographic attributes and appear to be a lifestyle choice that cuts across income, age, and other socioeconomic attributes.

- The “**Super Connected**”, with 6 or more devices, are more likely than all connected consumers to be early adopters of leading-edge devices such as voice-activated devices (e.g. Alexa, Allo), smart cars and wearables, yet their income, age and household size are roughly similar to all connected consumers.
- “**Connected Home**” consumers own devices that are more entertainment and home-centric, such as video game consoles, smart thermostats and voice activated devices.
- “**Connected Me**” consumers own devices that are more person-centric, such as activity trackers and smart/sports watches.

■ The Purchasing Pain Points That Connected Consumers Want Connected Devices To Eliminate

MORE THAN 60% of consumers say that buying and paying for things – both online and in a physical store is inefficient, unproductive and time consuming and could be improved.

- Nearly 80 percent of connected consumers made a purchase in a physical store over a seven-day period.
- 50 percent of connected consumers purchased something online over a seven-day period and did so in 11 of the 19 categories we surveyed, including many categories once reserved for physical stores - household furnishings, home supplies, electronics, even groceries and gasoline.
- 83 percent of consumers view using connected devices as a way to eliminate friction from how they buy and pay for things – both on and offline.

DATA PRIVACY, SECURITY AND TRANSPARENCY CONCERN ALL CONNECTED CONSUMERS

How Connected Consumers See The Future of Connected Devices and New Ways to Pay

Consumers are interested in using connected devices to eliminate checkout frictions and enable a seamless payment experience.

- **44%** of connected consumers would like the chance to auto pay for things they buy – without having to physically initiate checkout or stop at a counter in a store to do so.
- The Super Connected are 8 times more likely than the typical connected consumer to be interested in use cases in which appliances auto refill/auto pay.
- More than two-thirds of consumers view connected devices to help them pay for things that they want to buy while they are going about their day to day activities, e.g. eating breakfast, commuting, cleaning up after dinner, cooking, taking care of the kids.

The Connected Payments Adoption Roadblocks and Who Connected Consumers Trust To Deliver It

As much as connected consumers like a seamless payments experience, they want control over how their data is used and secured.

- **76%** of all connected consumers expressed concerns over data privacy when using connected devices to pay for things; 71 percent expressed concerns about data security.
- Nearly 70 percent of consumers expressed concerns about whether they would be charged the proper amount when connected devices initiate a connected payments experience.
- Only 36 percent of consumers seem concerned about the learning curve in using connected devices (current or future) to buy and pay for things.

77 PERCENT OF CONSUMERS WANT THEIR BANK /BANKCARD NETWORK TO POWER THEIR CONNECTED PAYMENTS EXPERIENCE

■ Consumers overwhelmingly trust their bankcard issuer/bankcard network to enable their connected device payments experience.

- **77%** of connected consumers view their financial institution/ bankcard network as the most trusted enabler of a connected device payment solution.
- Fewer than 30 percent of connected consumers trust the large technology enablers to provide such a solution (Google 26 percent, Apple 23 percent, Microsoft 10 percent).
- Only 8 percent of connected consumers trust Facebook to enable such a solution.

■ The Devices The Connected Consumers See Powering Their Connected Payments Experience

- Connected consumers see the value in new use cases that can make their buying experiences more efficient but have trouble understanding how today's devices can make it possible.
- More than 66 percent of consumers would like to use connected devices to improve how they buy and pay for things.
- The categories for which consumers believe connected devices can most improve their buying experience is when they buy food, clothing, household supplies/furnishings, prescriptions and gasoline.
- Only 38 percent of connected consumers see the smartphone as the connected device that will deliver those seamless payments experiences.



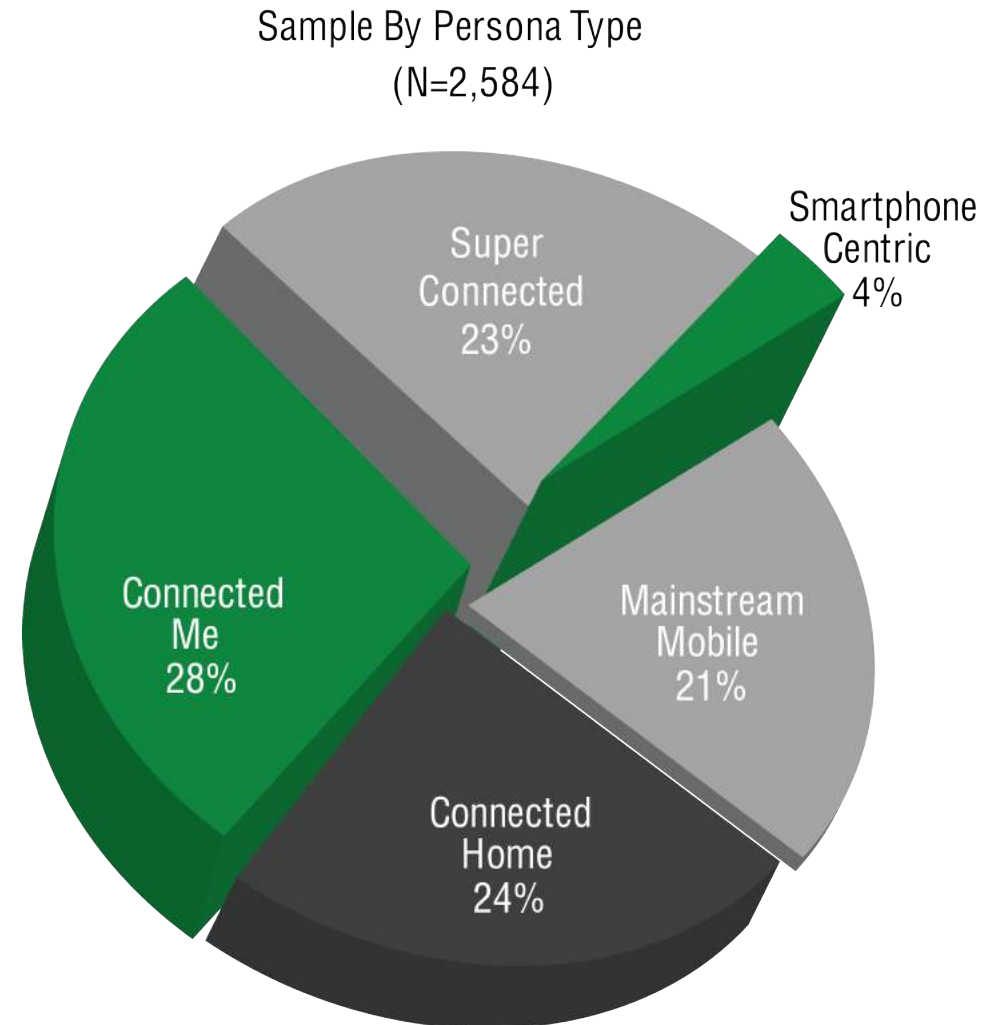
GETTING TO KNOW THE CONNECTED CONSUMER

Who's connected, what devices do they own and why do they use them today to make purchases?

HOW CONNECTED ARE WE? THE FIVE CONNECTED CONSUMER PERSONAS

75 PERCENT OF CONSUMERS OWN CONNECTED DEVICES IN ADDITION TO A SMARTPHONE, COMPUTER OR TABLET

- Smartphone-Centric**
This group just owns a smartphone
- Mainstream Mobile:**
This group owns a smartphone and a tablet or computer
- Connected Home**
Like Mainstream Mobile *plus* connected home devices (e.g. voice activated device, smart appliances)
- Connected Me**
Like Mainstream Mobile *plus* wearables (e.g. activity tracker, smart watch, or smart sports watch)
- Super Connected**
Like Mainstream Mobile *plus* 6 or more Connected Me or Connected Home devices



THE AVERAGE CONSUMER OWNS MORE THAN FOUR CONNECTED DEVICES

THE SUPER CONNECTED ARE THE EARLY ADOPTERS OF VOICE CONTROLLED ASSISTANTS AND WEARABLES

40 percent of the Super Connected own a voice controlled assistant and 79 percent own an activity tracker.

Only half of the Mainstream Mobiles own a tablet.

Only the Super Connected own smart clothing.

	All Combined	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
Average Number of Devices	4.4	1.0	2.5	3.9	4.3	7.1
Smartphone	100%	100%	100%	100%	100%	100%
Computer / Laptop	92%	0%	96%	94%	94%	99%
Tablet	70%	0%	53%	70%	70%	96%
Game Console (e.g. PlayStation, X-Box)	47%	0%	0%	73%	37%	83%
Activity Tracker (e.g. Fitbit)	41%	0%	0%	0%	81%	79%
Reader (e.g. Kindle)	21%	0%	0%	23%	10%	54%
Smartwatch (e.g. Apple Watch)	15%	0%	0%	0%	20%	40%
Voice Controlled Assistant (e.g. Amazon Alexa, Google Home)	14%	0%	0%	12%	5%	42%
Connected thermostat (e.g. Nest)	9%	0%	0%	8%	2%	26%
Virtual reality headset	7%	0%	0%	7%	2%	23%
Smart sports watch	6%	0%	0%	0%	5%	18%
Smart accessories (e.g. ring or wristband)	5%	0%	0%	2%	1%	19%
Wearable camera	5%	0%	0%	5%	1%	14%
Smart Refrigerator	3%	0%	0%	2%	1%	10%
Smart clothing (e.g. Owlet Baby Socks, Sensor Running Socks)	1%	0%	0%	0%	0%	5%

Q. What devices do you own?

CONNECTED CONSUMERS ARE MORE ALIKE THAN THEY ARE DIFFERENT

AGE, INCOME AND GENDER ARE NOT PREDICTORS OF CONNECTED DEVICE OWNERSHIP, INTEREST OR USAGE

- Connected device ownership and usage tends to be lifestyle and not income and age dependent.
- The Super Connected are more likely to be college educated, with slightly larger households, and with higher incomes – but only slightly.
- Mainstream Mobile tends to be slightly older than those who are more connected.

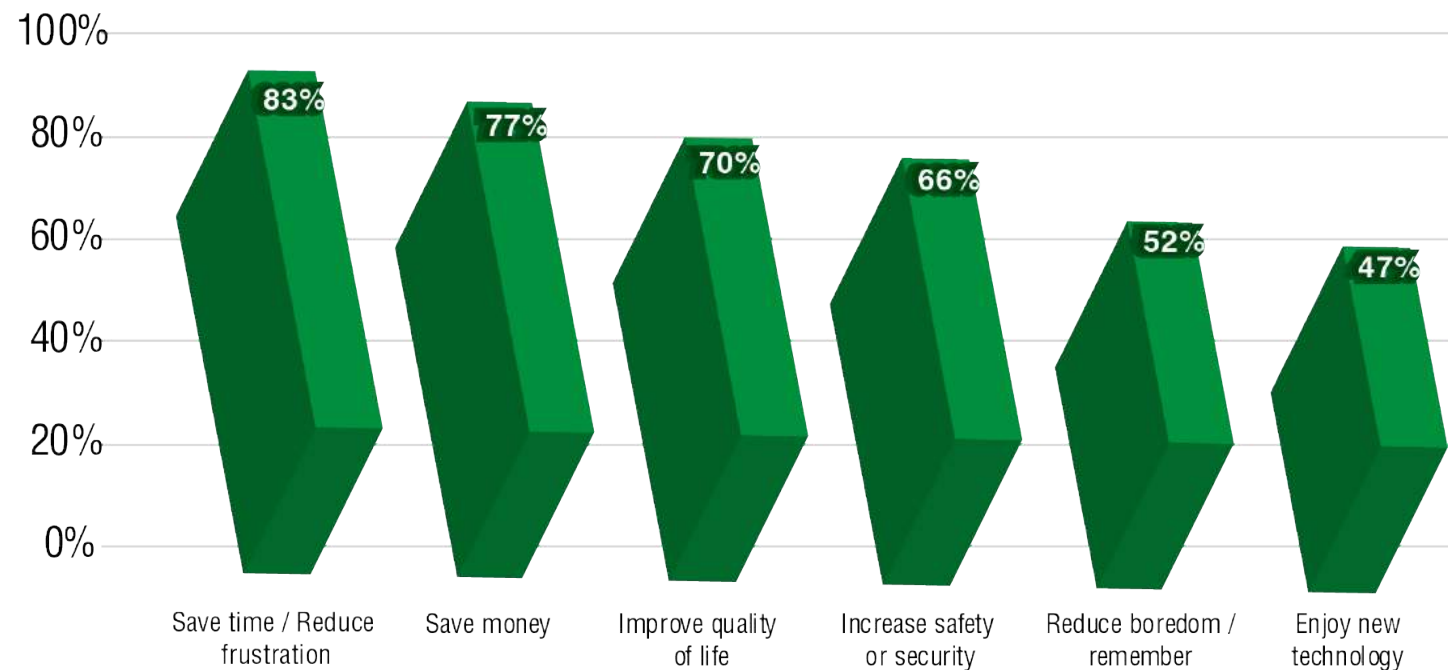
	All Combined	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
Average Age	41.4	41.6	43.2	40.8	41.3	40.6
Average Income	78.3	76.7	76.4	78.1	79.3	79.3
Average Household Size	2.9	2.8	2.6	3.1	2.8	3.3
College Educated	46.6%	34.8%	43.5%	36.8%	52.0%	54.5%
Female	50.0%	45.5%	50.0%	49.9%	56.5%	44.0%
Have Children	50.0%	51.6%	60.2%	47.7%	55.8%	36.2%

SAVING TIME IS WHAT DRIVES INTEREST IN USING CONNECTED DEVICES TO PAY

CONSUMERS VIEW CONNECTED DEVICES AS THE WAY TO ELIMINATE PAYMENT FRICTION WHEN SHOPPING

- 83 percent of consumers say using connected devices to pay will save time and/or reduce their frustration in making a payment.
- Consistent with that is their view that connected devices also improve their quality of life.
- Overall, consumers are less interested in using connected devices just because they are new technologies.

What is very important to using connected devices to pay?



CONNECTED CONSUMERS VIEW CONNECTED DEVICES AS A WAY TO IMPROVE PAYMENT SECURITY

SAVING MONEY IS ALSO SOMETHING THAT CONNECTED CONSUMERS VIEW AS VERY IMPORTANT

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Index Mainstream Mobile = 100				
Save time / reduce frustration	83%	117.1	100.0	117.4	120.3	126.6
Save money	77%	116.1	100.0	125.9	120.3	125.6
Improve quality of life	70%	135.3	100.0	119.1	119.6	127.2
Increase safety or security	66%	120.0	100.0	120.8	125.1	130.0
Reduce boredom / remember	52%	132.4	100.0	100.5	104.0	120.6
Enjoy new technology	47%	135.1	100.0	120.9	112.9	142.1

SEAMLESS CHECKOUT APPEARS TO BE THE “KILLER APP” FOR THE CONNECTED DEVICE

THERE IS STRONG INTEREST IN USING CONNECTED DEVICES TO PAY, EVEN FOR DEVICES AND USE CASES THAT DON'T YET EXIST

- Consumers place a strong emphasis on devices that make payments part of a seamless buying experience.
- Devices that enable “auto payment” are interesting to all connected consumers.
- Devices that enable “auto ordering” and payment are less interesting to all consumers.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Index Mainstream Mobile = 100				
Auto pay at store	44%	89.5	100.0	118.6	125.5	154.5
Auto pay at pump	41%	91.6	100.0	116.6	130.6	169.8
Auto fit / auto buy clothing	40%	80.9	100.0	111.0	124.1	142.5
Auto pay at restaurant	37%	85.8	100.0	134.5	133.3	178.2
Auto parking spot discovery / auto pay	36%	65.5	100.0	109.8	131.5	157.9
Auto car trouble alerts / Auto pay for repairs	34%	97.8	100.0	121.1	132.0	164.9
Auto home trouble alerts / auto pay for repairs	30%	101.1	100.0	122.9	145.6	169.1
Frig / pantry auto orders grocery	27%	112.2	100.0	113.7	138.8	189.2
Window shop / auto buy and pay	25%	111.1	100.0	114.3	125.9	159.7
Appliances auto order refills (exclude frig)	25%	119.2	100.0	134.0	157.9	221.0
Car personal assistant initiates order ahead	24%	109.2	100.0	114.6	138.4	202.6
Auto order for worn out shoes / clothes	15%	127.3	100.0	95.7	137.4	181.8

Q. What uses cases are of most interest in using a connected device to facilitate a payment with a merchant?

CONNECTED DEVICE DATA SECURITY, PRIVACY AND TRANSPARENCY CONCERN ALL CONSUMERS

THESE CONCERNS COULD DETER CONSUMERS FROM ADOPTING NEW CONNECTED DEVICE PAYMENTS USE CASES

Consumers express concerns over being charged incorrectly when payments are automatically made via a connected device.

Twice as many consumers express concerns about data privacy than learning how to use new technology.

Device reliability is nearly as much of a concern as data security to the Super Connected when using connected devices to enable new ways to pay.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Index Mainstream Mobile = 100				
Data privacy	76%	85.4	100.0	109.8	108.8	108.8
Data and/or product security (theft)	71%	80.5	100.0	108.2	105.6	112.1
Ability to verify the correct products and amounts charged	69%	81.8	100.0	109.7	112.0	114.5
Reliability of the technology	67%	68.7	100.0	110.8	106.2	116.7
Cost to use technology	59%	89.6	100.0	114.2	106.5	116.7
Loss of detailed knowledge of spending	54%	79.6	100.0	107.1	106.1	112.4
Reduction in customer service	40%	103.3	100.0	99.8	98.5	112.9
Difficulty in learning to use the technology	36%	103.3	100.0	96.3	94.4	109.3

Q. What would hold you back from using a connected device to make a payment at a merchant?

CONNECTED CONSUMERS TRUST CARD ISSUERS AND CARD NETWORKS TO ENABLE CONNECTED DEVICE PAYMENT

77 PERCENT OF CONSUMERS TRUST THEIR BANK OR BANKCARD NETWORK TO POWER A CONNECTED PAYMENT EXPERIENCE

Banks are, by far, the most trusted by consumers to enable connected device payments.

The more connected a consumer is, the more they trust financial services providers to enable new connected device use cases.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Index Mainstream Mobile = 100				
Bank & Bankcard Networks (Bank, V, MC)	77%	76.0	100.0	104.6	104.0	108.8
My Bank	68%	71.8	100.0	110.9	107.9	111.3
Card Networks (V, MC, AmEx, Disc)	49%	64.5	100.0	111.3	109.6	133.5
Amazon	48%	102.8	100.0	149.8	150.6	183.3
Bankcard Networks (V+MC)	42%	56.3	100.0	111.7	108.1	134.2

Q. Who do you trust to enable such a connected device payments experience?

CONSUMERS LIKE AND TRUST CARD PRODUCTS WHEN PAYING FOR THINGS – BOTH ON AND OFFLINE

SPEED AND TRUST ARE WHAT MOST CONSUMERS LIKE ABOUT USING CARDS AND MOBILE OVER CASH

61 percent of all consumers say that speed or trust is the most important reason they use cards.

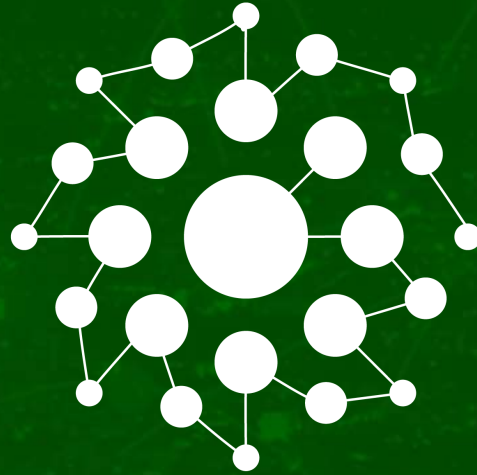
Two-thirds of people prefer using card or mobile over cash.

77 percent of people would patronize stores even if they dropped cash.

Still, 60 percent of consumers would want to use cash sometimes, even if they could pay with cards and mobile everywhere.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Mainstream Mobile Index = 100				
What is most appealing about paying with a card or devices?						
It is faster and more convenient	34%	105.1	100.0	111.6	96.0	99.4
I trust the payment network to keep my information secure (e.g. Visa, Mastercard)	26%	75.4	100.0	96.3	101.1	111.2
I can collect rewards	21%	113.9	100.0	81.9	95.2	81.8
Feels safer to not carry cash in my wallet	19%	107.0	100.0	107.7	112.4	109.4
Select the statement that represents your position on making payments						
I never use cash and I am excited to be able to pay everywhere using my cards and mobile devices	26%	82.6	100.0	108.2	119.6	121.7
I sometimes use cash but prefer to use my cards or mobile devices	64%	105.4	100.0	99.1	97.8	98.5
I always use cash and prefer it to my cards or mobile devices	10%	104.4	100.0	88.7	73.6	65.7
If a store I visit frequently went cashless (exclusively accepting electronic and mobile payments), I would:						
Continue to shop there using cards or mobile devices	77%	82.6	100.0	112.9	111.6	105.8
Shop there more frequently	14%	169.5	100.0	62.4	74.3	101.9
No longer shop there	8%	109.4	100.0	73.0	63.7	60.1
Select the option you agree with most to complete the statement, "can imagine myself not using cash to make payments"						
If cards were accepted everywhere today	32%	90.5	100.0	89.7	97.8	93.9
If mobile payments were accepted everywhere	13%	129.9	100.0	80.5	87.9	96.9
If both cards and mobile payments were accepted everywhere today	40%	96.9	100.0	113.3	117.3	127.5
Only if I do not have cash in my wallet and an ATM is not nearby	15%	102.8	100.0	110.9	81.5	61.5

Q. Why do you use cards and what would make you use cards more?



THE CONNECTION TO PAYMENTS

How do connected consumers view buying and paying?

CONNECTED CONSUMERS BUY MORE THINGS – THE MORE CONNECTED, THE MORE THEY BUY

THE SUPER CONNECTED LIKE TO BUY EXPERIENCES, ELECTRONICS AND ACCESSORIES, LIKE JEWELRY

Not surprisingly, consumer spend is concentrated in clothing and food.

The Connected Me are more likely to buy personal care services and travel than the Connected Home who are more likely to buy entertainment-related items.

The Smartphone Centric spend more on accessories and home repair.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Index Mainstream Mobile = 100				
Any of these	66%	74.2	100.0	106.1	109.1	124.2
Gasoline	27%	54.9	100.0	102.0	100.1	126.4
Food to consume at home	24%	66.9	100.0	123.5	112.8	123.7
Household supplies	24%	57.3	100.0	118.1	97.1	150.3
Personal care products	20%	55.7	100.0	115.5	99.2	168.2
Clothing, apparel or footwear	20%	103.3	100.0	96.9	116.7	138.4
Healthcare goods and medications	16%	84.6	100.0	135.5	118.1	212.4
Food to consume away from home	11%	45.4	100.0	115.5	85.5	139.4
Household furnishings or equipment	11%	102.2	100.0	147.1	132.2	249.5
Automobile repair services	10%	74.8	100.0	122.9	114.4	192.0
Goods or services for pets	8%	51.1	100.0	135.2	162.3	292.3
Travel services such as airline or bus tickets	7%	24.5	100.0	133.2	112.5	208.7
Electronics (tablet, computer, smartphone, etc.)	6%	133.3	100.0	167.1	97.2	193.4
Household repair service	6%	144.3	100.0	165.8	174.0	291.9
Personal care services	6%	0.0	100.0	99.6	188.3	256.6
Housing while away from your primary home (e.g. hotels)	5%	102.2	100.0	113.9	144.3	242.4
Accessories such as jewelry	5%	129.1	100.0	112.4	91.1	256.6
Tobacco or alcohol	5%	49.0	100.0	99.1	54.8	164.3
Entertainment other than reading materials	4%	87.6	100.0	146.4	154.6	256.6
Reading materials (books, newspapers, magazines)	3%	0.0	100.0	484.0	577.0	769.9

Q. What purchases did you make over the last seven days?

CONNECTED CONSUMERS STILL SHOP AT PHYSICAL STORES

ALMOST 80 PERCENT OF CONSUMERS VISITED A PHYSICAL STORE OVER A SEVEN DAY PERIOD AND BOUGHT SOMETHING

- The Super Connected are much more likely to shop using a connected device than any other connected persona.
- They are also seven times more likely to use a voice controlled assistant.
- They are more than five times more likely to use a car with connected capabilities.
- And while, infrequent, much more likely to use other connected devices to pay for things.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Index to Mainstream Mobile = 100				
Visiting a store	77%	99.0	100.0	98.0	98.4	97.3
Using a website on mobile/tablet	28%	43.3	100.0	110.9	115.1	153.6
Online, using a desktop	25%	79.2	100.0	120.1	119.5	162.1
Using an app on a mobile/tablet	18%	90.5	100.0	116.3	115.6	154.3
Placing an order over the phone	10%	174.3	100.0	116.0	108.1	166.0
Connected or Smart TV	2%	240.7	100.0	106.3	84.5	193.9
Car with connected capabilities	2%	350.4	100.0	229.4	122.9	561.1
Game Console (e.g. PlayStation, X-Box)	1%	159.3	100.0	185.9	294.4	594.7
Voice Controlled Assistant	1%	0.0	100.0	175.9	129.6	680.5
Other option	1%	0.0	100.0	117.1	231.6	740.0
Activity Tracker (e.g. Fitbit)	1%	n/a	n/a	vl	vl	vl
Smartwatch (e.g. Apple Watch)/Smart Sports watch	0%	n/a	n/a	n/a	vl	vl
Smart Refrigerator	0%	n/a	n/a	vl	vl	vl
Wearable camera (e.g. Go Pro)	0%	n/a	n/a	vl	n/a	vl
Smart clothing or accessories	0%	n/a	n/a	n/a	n/a	vl

Q. What did you use to pay for the things that you purchased in the last seven days?

"vl" indicates "Very Large." In these cases, the Mainstream Mobile response was zero and therefore the persona index could not be calculated. In that case, they would be very large compared to the base unless the response for that persona was zero as well. "n/a" means that both the persona and Mainstream Mobile were zero.

CONSUMERS USING CONNECTED DEVICES TO BUY THINGS IS WIDESPREAD NOW

BUYING VIA A CONNECTED DEVICE OVERTAKES SHOPPING IN A PHYSICAL STORE IN KEY CATEGORIES

- Shopping at physical stores is still the most common way to shop, particularly for groceries, gas and home supplies.
- In 11 out of 19 categories, 50 percent or more of consumers purchased online over a seven day period.
- Online via any connected device beats physical stores in entertainment, reading materials, travel, household repairs, electronics, household furnishings and clothing for all consumers.

	Visiting a store	Any Online	Using a website on mobile/tablet	Online, using a desktop	Using an app on a mobile/tablet	Placing an order over the phone
Tobacco or alcohol	99%	7%	4%	3%	2%	2%
Gasoline	96%	7%	4%	2%	2%	2%
Food to consume at home	93%	48%	25%	22%	20%	17%
Household supplies	87%	42%	21%	20%	16%	5%
Personal care products	86%	44%	23%	21%	17%	5%
Food to consume away from home	85%	47%	22%	18%	18%	17%
Healthcare goods and medications	81%	50%	20%	19%	17%	15%
Goods or services for pets	80%	47%	23%	23%	13%	7%
Personal care services	76%	50%	25%	24%	16%	12%
Clothing, apparel or footwear	73%	76%	44%	43%	26%	8%
Automobile services	69%	54%	27%	25%	16%	11%
Household furnishings or equipment	66%	72%	41%	35%	20%	10%
Accessories such as jewelry	64%	63%	35%	30%	22%	8%
Travel services such as airline or bus tickets	62%	97%	50%	32%	10%	9%
Housing while away from your primary home (e.g. hotels)	55%	93%	49%	29%	14%	13%
Electronics (tablet, computer, smartphone, etc.)	54%	78%	46%	42%	28%	11%
Entertainment other than reading material	46%	76%	44%	36%	35%	12%
Reading material (books, newspapers, magazines)	43%	75%	40%	34%	30%	7%
Household repair services	42%	74%	36%	31%	29%	13%

Q. Where did you shop and what device did you use to make the purchase over the last seven days?

ROUGHLY SIXTY PERCENT OF CONSUMERS DISLIKE THE CURRENT SHOPPING EXPERIENCE

ALL CONSUMERS FIND SHOPPING ACROSS ALL CHANNELS TIME-CONSUMING AND INEFFICIENT

Most (~60 percent) don't find shopping fun or productive – regardless of how they shop.

More than 25 percent of consumers say shopping is time consuming and inefficient.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
Percentage of Respondents						
Productive	39%	32%	40%	39%	40%	38%
Fun, stimulating	39%	47%	38%	38%	39%	41%
Time consuming	27%	26%	25%	27%	24%	30%
Index (Mainstream Mobile =100)						
Productive	97.0	79.7	100.0	97.5	99.3	93.7
Fun, stimulating	102.5	123.1	100.0	99.1	100.8	106.9
Time consuming	105.5	104.2	100.0	106.5	95.0	117.4

Q. How would you describe your shopping experience over the last seven days?

TWO-THIRDS OF CONNECTED CONSUMERS THINK THE SHOPPING EXPERIENCE COULD BE BETTER

ALL CONNECTED CONSUMERS SEE ROOM FOR IMPROVEMENT WHEN BUYING THE BASICS: FOOD AND CLOTHING

The areas in which most consumers would like to see improvements in how they pay for things *in a physical store* are: groceries, household supplies, prescriptions, household furnishings, and repair services (home and auto repair).

For all but the smartphone centric, the areas in which most consumers would also like to see improvements in how they pay for things *online* are: travel and hotel bookings.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Index Mainstream Mobile = 100				
Any of These	66%	74.2	100.0	106.1	109.1	124.2
Gasoline	27%	54.9	100.0	102.0	100.1	126.4
Food to consume at home	24%	66.9	100.0	123.5	112.8	123.7
Household supplies	24%	57.3	100.0	118.1	97.1	150.3
Personal care products	20%	55.7	100.0	115.5	99.2	168.2
Clothing, apparel or footwear	20%	103.3	100.0	96.9	116.7	138.4
Healthcare goods and medications	16%	84.6	100.0	135.5	118.1	212.4
Food to consume away from home	11%	45.4	100.0	115.5	85.5	139.4
Household furnishings or equipment	11%	102.2	100.0	147.1	132.2	249.5
Automobile repair services	10%	74.8	100.0	122.9	114.4	192.0
Goods or services for pets	8%	51.1	100.0	135.2	162.3	292.3
Travel services such as airline or bus tickets	7%	24.5	100.0	133.2	112.5	208.7
Electronics (tablet, computer, smartphone, etc.)	6%	133.3	100.0	167.1	97.2	193.4
Household repair service	6%	144.3	100.0	165.8	174.0	291.9
Personal care services	6%	0.0	100.0	99.6	188.3	256.6
Housing while away from your primary home (e.g. hotels)	5%	102.2	100.0	113.9	144.3	242.4
Accessories such as jewelry	5%	129.1	100.0	112.4	91.1	256.6
Tobacco or alcohol	5%	49.0	100.0	99.1	54.8	164.3
Entertainment other than reading material	4%	87.6	100.0	146.4	154.6	256.6
Reading material (books, newspapers, magazines)	3%	0.0	100.0	484.0	577.0	769.9

Q. Based on what you bought over the last seven days, do you see an opportunity for improving how you made those purchases?

CONSUMERS DON'T SEE HOW CONNECTED DEVICES CAN HELP THEM BUY THINGS WHILE DOING OTHER ACTIVITIES

CONNECTED DEVICES BLUR THE ON AND OFFLINE BUYING WORLDS BUT CONSUMERS CAN'T YET SEE THOSE DEVICES CAN MAKE THE EXPERIENCE MORE SEAMLESS

Shopping and cleaning were the only activities that more than 10 percent of consumers saw an opportunity for a connected device to improve how they buy things while going about their day-to-day activities.

The Super Connected see more ways that connected devices could make it easier to buy things while they are going about their daily activities.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connectors
	Percent	Index Mainstream Mobile = 100				
Grocery Shopping	18%	60.0	100.0	113.3	113.3	160.0
Cleaning House	12%	112.5	100.0	162.5	237.5	200.0
Shopping, not including Groceries	11%	87.5	100.0	150.0	125.0	187.5
Paying Household Bills	10%	57.1	100.0	128.6	128.6	200.0
Watching TV	9%	62.5	100.0	112.5	100.0	137.5
Preparing Meals	9%	33.3	100.0	166.7	166.7	216.7
Doing Laundry	9%	42.9	100.0	157.1	100.0	171.4
Cleaning Kitchen after meals	9%	33.3	100.0	166.7	166.7	216.7
Commuting to Work	7%	83.3	100.0	100.0	116.7	150.0
Recreational Activities	6%	250.0	100.0	150.0	150.0	200.0
Eating Dinner	6%	50.0	100.0	125.0	150.0	200.0
Working at Main Job	5%	125.0	100.0	125.0	100.0	175.0
Eating Lunch	5%	75.0	100.0	100.0	125.0	175.0
Eating Breakfast	4%	100.0	100.0	133.3	133.3	166.7
Caregiving	3%	0.0	100.0	400.0	200.0	400.0
Yard Work	2%	200.0	100.0	100.0	100.0	300.0

Q For what activities would you find having a connected device available to make a purchase valuable?

CONSUMERS DON'T YET SEE HOW TODAY'S DEVICES COULD IMPROVE TOMORROW'S CONNECTED BUYING EXPERIENCE

CONSUMERS WANT BUYING THINGS TO BE MORE EFFICIENT, THEY JUST DON'T KNOW WHAT DEVICES WILL DO THAT

Consumers like and use connected devices today, but they have trouble seeing how those devices can improve a seamless buying experience in the future.

Despite the widespread ownership and usage of smartphones, more than 60 percent of consumers don't think that they are the device that will deliver that seamless buying experience.

Connected consumers view smart accessories, smart cars and wearables as devices that could enable a more seamless buying experience in the future.

	Entire Sample	Smartphone Centric	Mainstream Mobile	Connected Home	Connected Me	Super Connected
	Percent	Index Mainstream Mobile = 100				
Smartphone	38%	55.6	100.0	113.9	102.8	105.6
Smart Car	14%	69.2	100.0	115.4	92.3	115.4
Tablet	9%	28.6	100.0	114.3	100.0	171.4
Smart TV	6%	33.3	100.0	100.0	83.3	116.7
Smart Accessories	6%	220.0	100.0	60.0	100.0	160.0
Smartwatch	4%	200.0	100.0	100.0	400.0	800.0
Game Console	3%	0.0	100.0	300.0	100.0	500.0
Voice Controlled Assistant	2%	400.0	100.0	100.0	100.0	300.0
e-Reader	2%	200.0	100.0	200.0	100.0	300.0
Smart Sportwatch	1%	vl	n/a	vl	vl	vl
Smart Clothing	1%	200.0	100.0	100.0	100.0	200.0

Q For the kinds of purchases you made today, what devices would you find valuable in improving that experience in the future?

“vl” indicates “Very Large.” In these cases, the Mainstream Mobile response was zero and therefore the persona index could not be calculated. In that case, they would be very large compared to the base unless the response for that persona was zero as well.

“n/a” means that both the persona and Mainstream Mobile were zero.

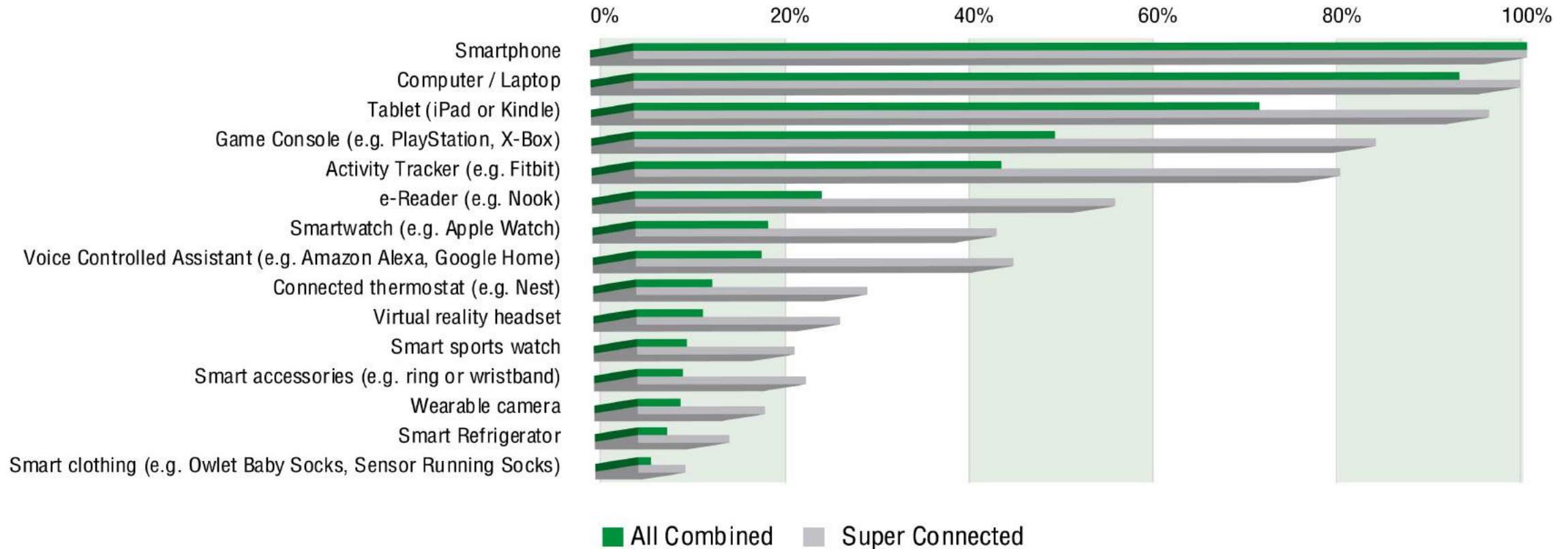
The background is a dark green gradient. In the upper left, there is a large, semi-transparent graphic of a green arrow pointing downwards with the text '54%' next to it. A line graph with a fluctuating upward trend is visible in the upper center. In the lower center, there is a faint, semi-transparent image of a hand holding a smartphone.

GETTING TO KNOW THE SUPER CONNECTED CONSUMER

How do they use connected devices today, and how do they see using them in the future – and how does that compare to all consumers?

THE SUPER CONNECTED ARE MUCH MORE LIKELY TO OWN CUTTING-EDGE CONNECTED DEVICES

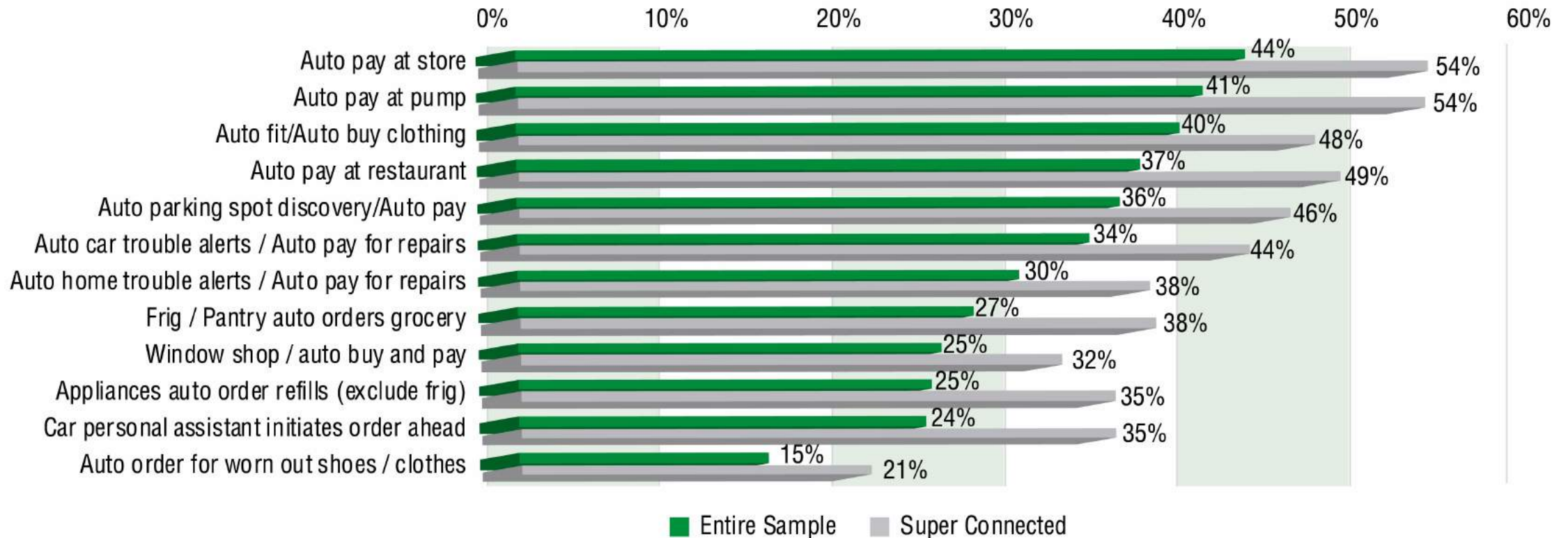
THE SUPER CONNECTED ARE MORE THAN SEVEN TIMES MORE LIKELY TO OWN A VOICE-ACTIVATED ASSISTANT



THE SUPER CONNECTED ARE MORE INTERESTED IN SEAMLESS PAYMENTS ACROSS ALL NEW USE CASES

54 PERCENT OF THE SUPER CONNECTED ARE INTERESTED IN USING AUTO PAY AT A STORE OR AT THE PUMP

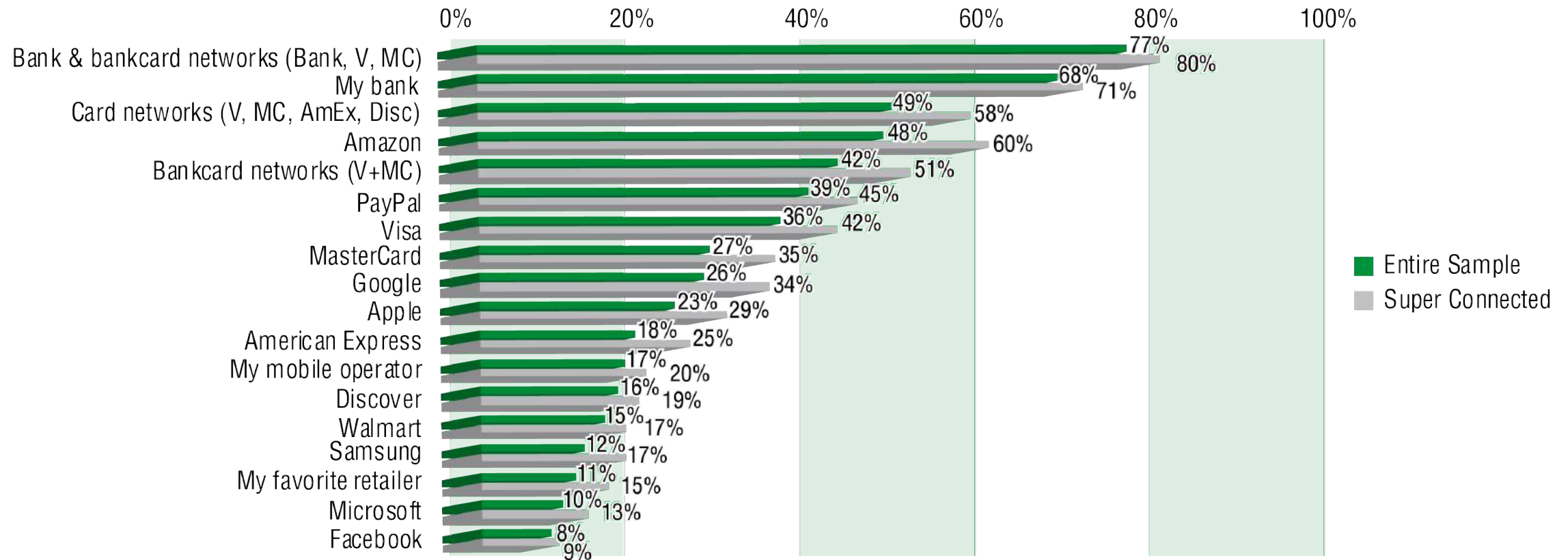
THE SUPER CONNECTED ARE MORE INTERESTED IN AUTO PAY AND AUTO ORDER AND PAY



THE SUPER CONNECTED TRUST BANKS TO ENABLE A CONNECTED DEVICE PAYMENT EXPERIENCE

80 PERCENT TRUST THEIR BANK AND BANKCARD NETWORK TO ENABLE A CONNECTED PAYMENT EXPERIENCE

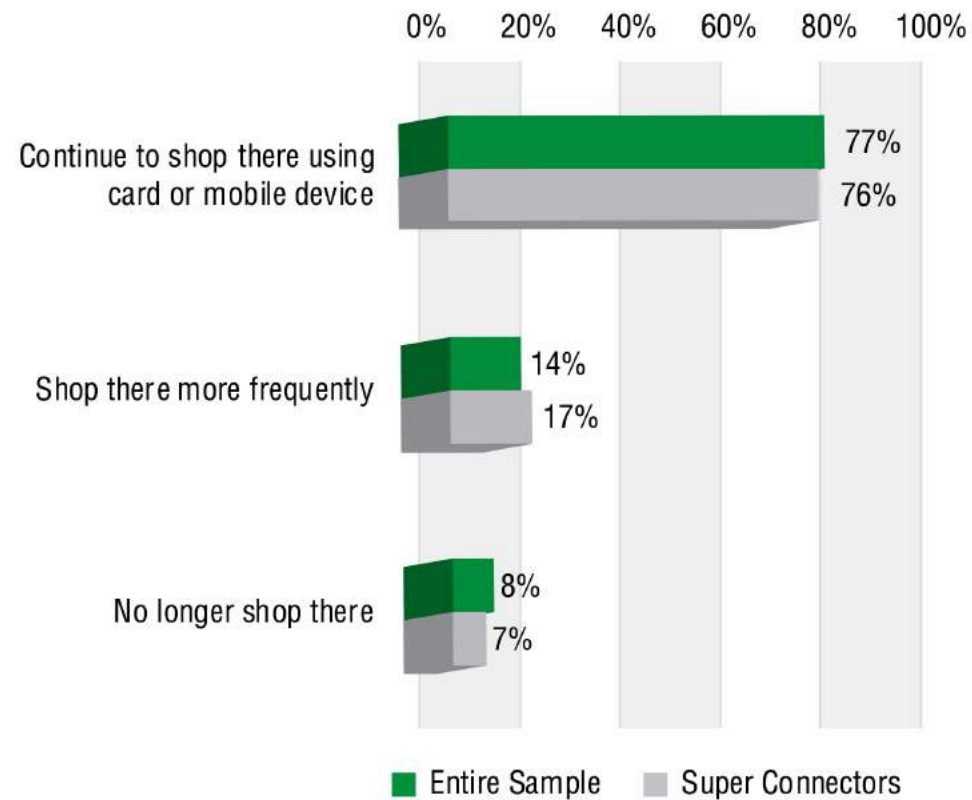
THE SUPER CONNECTED PLACE THE GREATEST TRUST IN THEIR BANKS AND CARD NETWORKS IN ENABLING A CONNECTED PAYMENTS EXPERIENCE



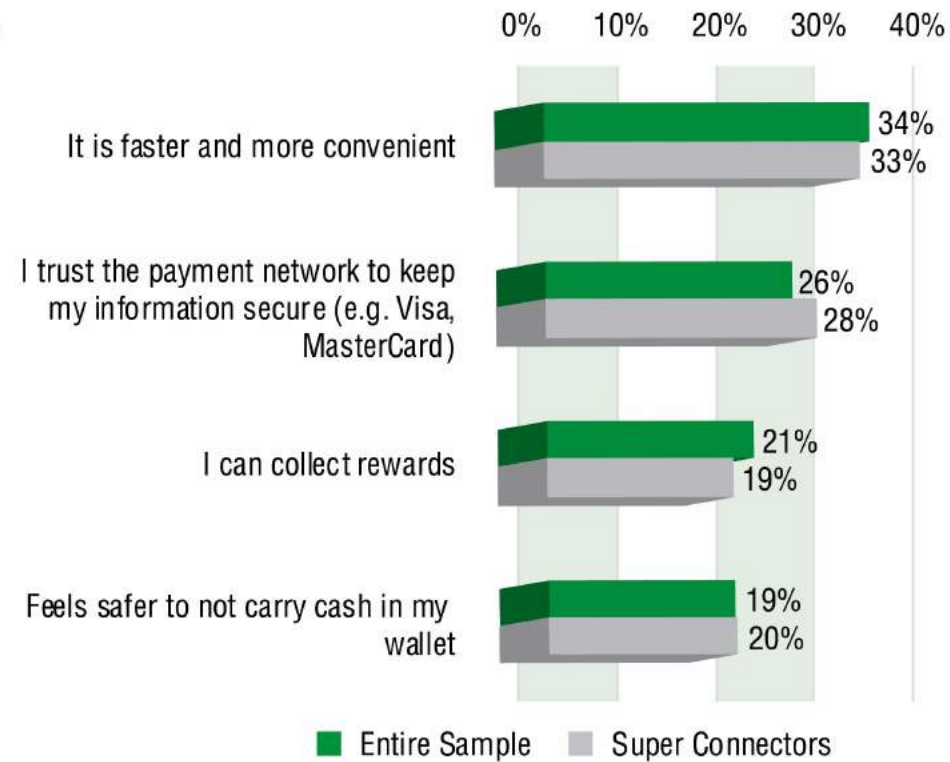
THE SUPER CONNECTED VALUE SPEED AND TRUST WHEN USING CARDS AS MUCH AS ALL CONSUMERS DO

REWARDS ARE LESS IMPORTANT TO THE SUPERCONNECTED – SPEED AND SECURITY SLIGHTLY MORE IMPORTANT

CONSUMER REACTION TO HAVING THEIR FAVORITE STORE GO CASHLESS



WHY CONSUMERS SAY THEY LIKE USING CARDS OR MOBILE OVER CASH

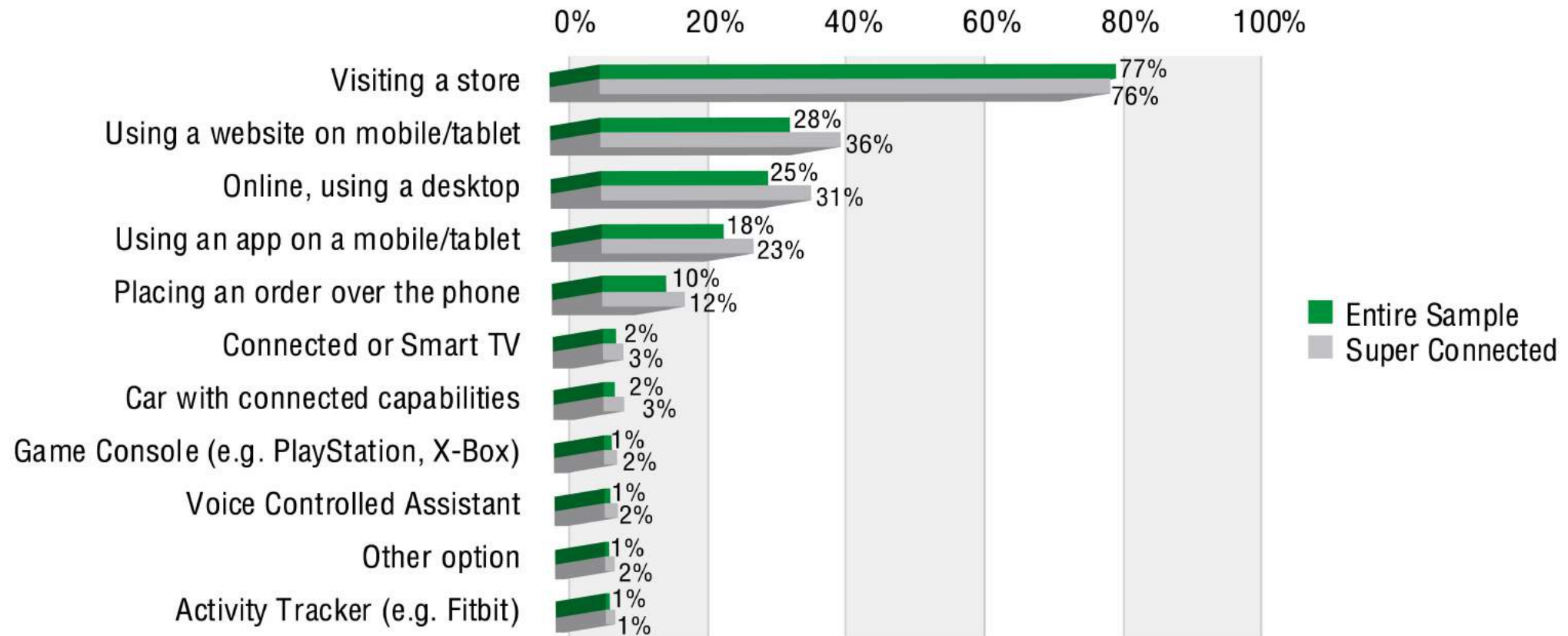


Q. Why do you use cards?

THE SUPER CONNECTED SHOP AT PHYSICAL STORES AS MUCH AS EVERYONE ELSE

THE SUPER CONNECTED ARE MORE LIKELY TO USE ONLINE CHANNELS TO MAKE PURCHASES

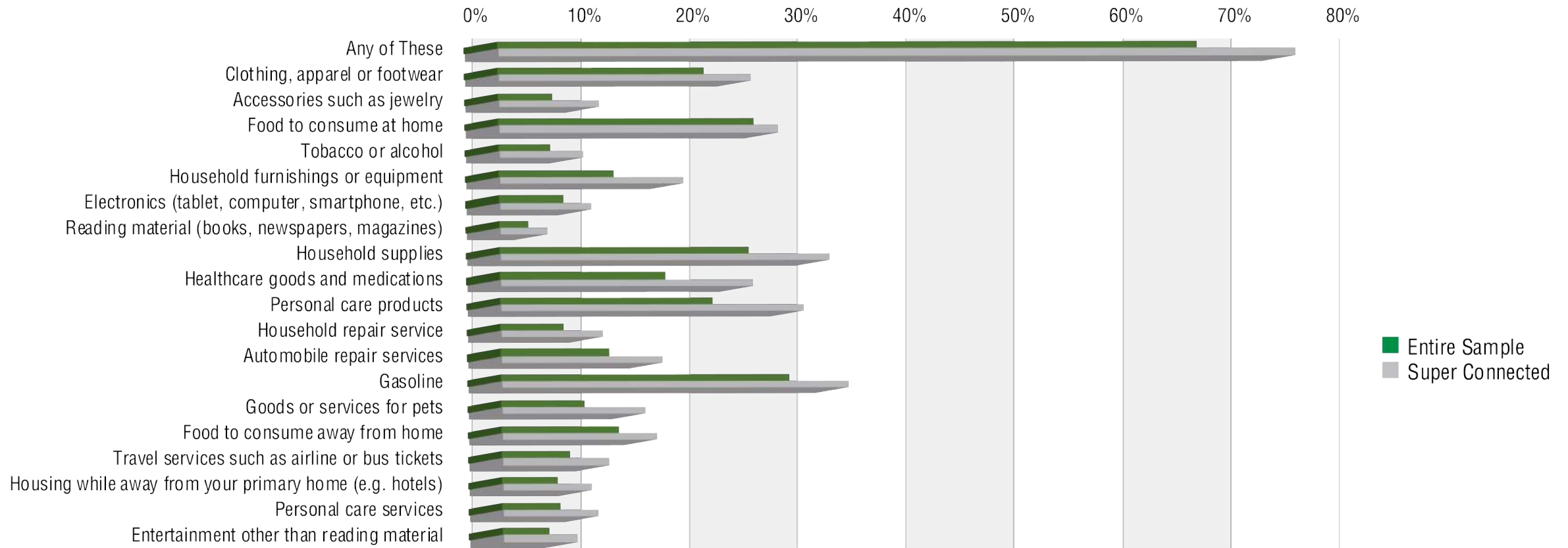
THE SUPER CONNECTED STILL SHOP AT PHYSICAL STORES, BUT SHOP ONLINE MORE THAN MOST CONSUMERS



SUPER CONNECTED ARE MORE LIKELY TO BELIEVE THAT HOW THEY BUY THINGS COULD BE BETTER

75 PERCENT OF THE SUPER CONNECTED SEE ROOM FOR IMPROVEMENT IN AT LEAST ONE OF THESE BUYING EXPERIENCES

MORE THAN 75 PERCENT OF THE SUPER CONNECTED SEE ROOM FOR IMPROVEMENT IN BUYING MOST THINGS



THE SUPER CONNECTED WANT DEVICES TO HELP THEM BUY THINGS WHILE DOING OTHER ACTIVITIES

MORE THAN ANY OTHER CONNECTED GROUP, THE SUPER CONNECTED SEE HOW USING CONNECTED DEVICES TO PAY CAN ADD VALUE TO EVERY ACTIVITY THEY UNDERTAKE

THE SUPER CONNECTED SEE MORE OPPORTUNITIES TO USE CONNECTED DEVICES TO BUY THINGS WHILE GOING ABOUT THEIR DAY-TO-DAY LIVES

