

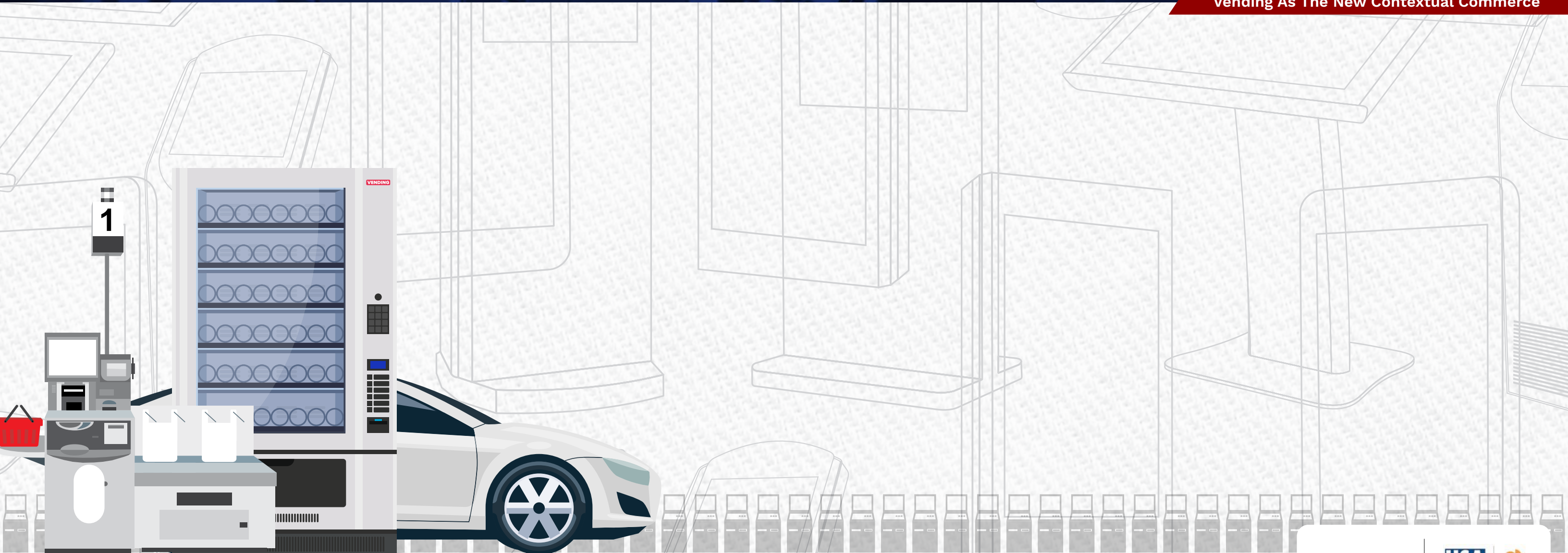
FEBRUARY 2020

38%
of consumers
would like to try
**NON-TRADITIONAL
UNATTENDED SHOPPING
EXPERIENCES.**

The Future Of Unattended Retail Report: Vending As The New Contextual Commerce, a PYMNTS and USA Technologies collaboration, details the findings from a survey of 2,325 U.S. consumers about their experiences with shopping via unattended retail channels and their interest in using them going forward.

THE FUTURE OF UNATTENDED RETAIL | REPORT

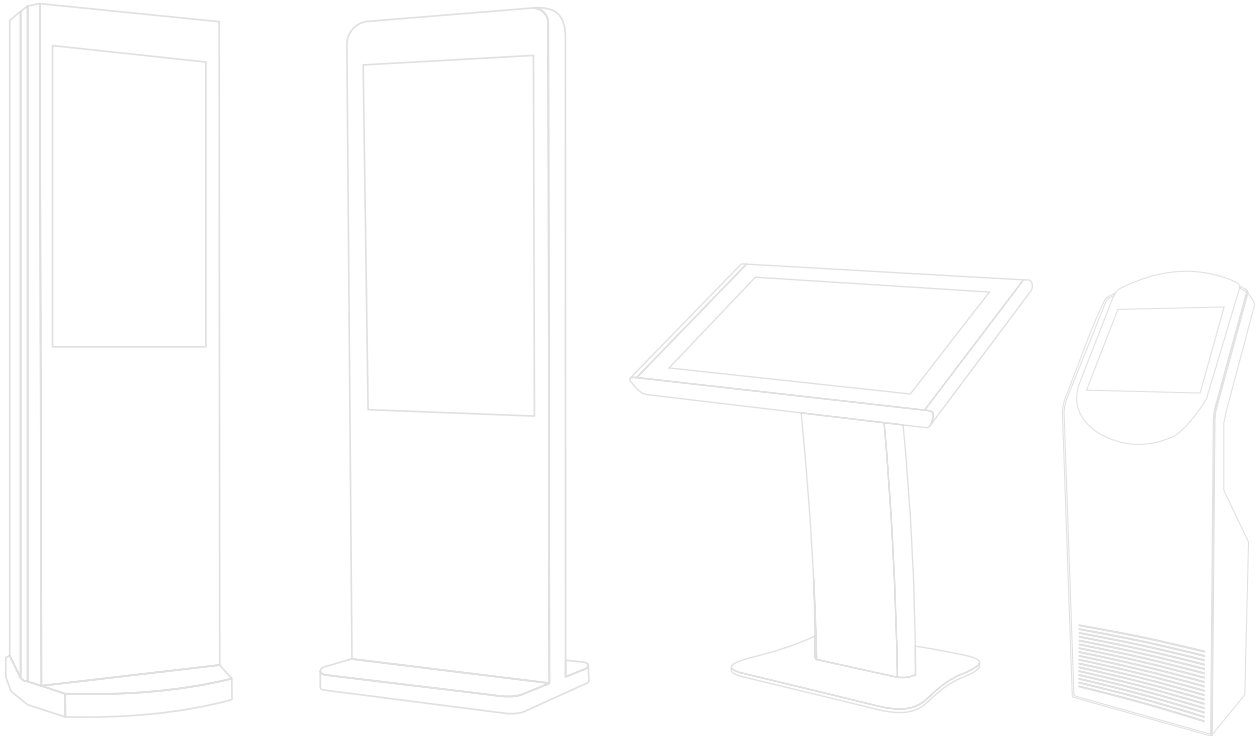
Vending As The New Contextual Commerce



PYMNTS.com



THE FUTURE OF UNATTENDED RETAIL | REPORT



01 | Introduction

09 | Shopping at their own paces

13 | Contextual commerce: Shopping anytime, anywhere

21 | The vending machine and beyond

27 | The (unattended) retail growth opportunity

31 | Deep Dive: Where mobile meets unattended

37 | Conclusion and methodology

39 | Executive insight



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THE FUTURE OF
UNATTENDED RETAIL

INTRODUCTION

The Thomas Adams Gum Co. of New York City began selling gum on the city's elevated subway platforms in 1888. The company's vending machines and Tutti-Frutti gum became instant hits, propelling it ahead of its competitors.¹

The technology was innovative for its time, but its success hinged on a time-less truism: When it comes to winning sales, the most important factor is putting the right product in the right place at the right time. The Thomas Adams Gum Co. bet big and won because its vending machines accomplished just that.

This principle holds true today. Vending machines and unattended retail technologies like them may no longer be novelties, but their success still hinges on providing the right products in the right places at the right times — preferably with fast, seamless and easy-to-use payment services.

Unattended retail touchpoints populate a broad and diverse set of locations and have taken various shapes and forms. Examples include touchscreen vending machines that tell buyers about nutritional information, automated electronic massage chairs and kiosks that sell elec-

tronics in airports, Minute Key machines that allow consumers to copy their keys and cashierless grocery stores — like Amazon Go — in major United States cities. These unattended retail services offer consumers fast and easy ways to shop, even during their commutes, without interacting with store employees.

Unattended retail solutions like these have become ubiquitous and diverse, but not all of them are meeting consumers' expectations, particularly in the items they sell. PYMNTS' research suggests that only one of every 10 consumers who would like to shop via unattended retail

¹ The editors of Encyclopaedia Britannica. Vending Machine. Encyclopaedia Britannica. 2020. <https://www.britannica.com/topic/department-store/>. Accessed February 2020.

channels actually do so, meaning the remaining 90 percent either lack access or are unsatisfied with their product offerings or the overall unattended shopping or payment experiences. This gap illustrates massive growth potential for merchants that can provide these experiences, so what would it take for these retailers to transform casual browsers into paying customers?

The Future Of Unattended Retail Report: Vending As The New Contextual Commerce, a PYMNTS and USA Technologies collaboration, details the findings from our extensive research. We surveyed 2,325 U.S. consumers about their experiences when shopping via unattended retail channels and their interest in using them going forward.

These are our key findings: _____

01

Consumers use unattended retail channels because they like shopping at their own paces.

Many consumers who use unattended retail channels — from vending machines and self-serve kiosks to cashierless stores — say they do so because such solutions are faster (cited by 49.4 percent) and offer shorter lines (34.7 percent). Thirty-three percent say they use these channels because they like to take their time while shopping without talking to employees.



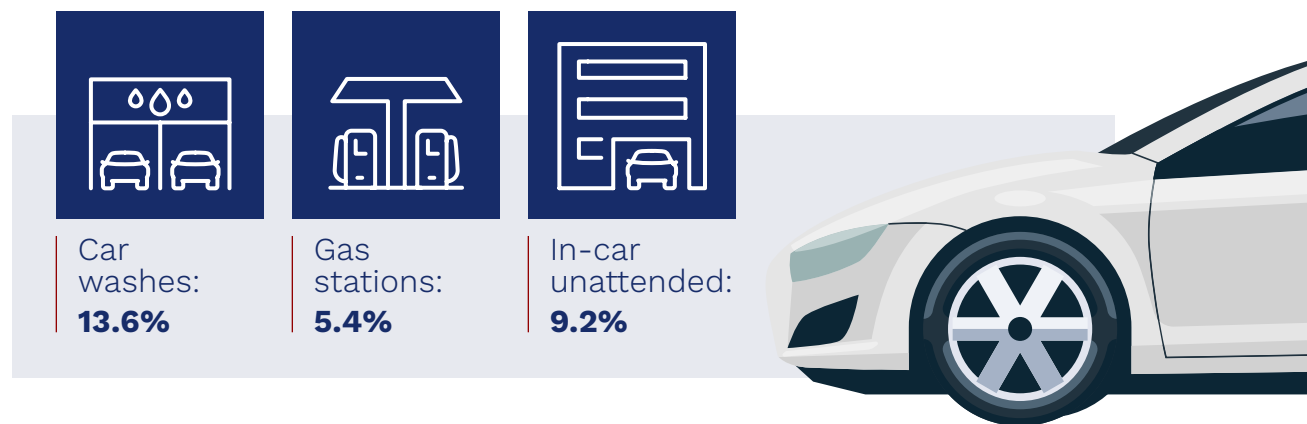
02

Contextual vending is redefining brick-and-mortar retail.

Consumers tend to make unattended purchases when they are presented with the right products in the right places at the right times. Our survey found that some of the most common locations at which consumers make unattended retail purchases are brick-and-mortar retail spots (cited by 15.6 percent) and grocery stores (13.4 percent).



Cars are also conduits for connected commerce, with many consumers buying unattended retail goods from the comfort of their vehicles. Our research reveals that 13.6 percent of unattended shoppers made their most recent unattended retail purchases at car washes, and 5.4 percent made them at gas stations. Such unattended purchases include those made at self-service gas stations or machines that allow consumers to pump air into their tires. Another 9.2 percent made in-car unattended purchases, such as those made at fast food chains or when taking tickets at parking garages.

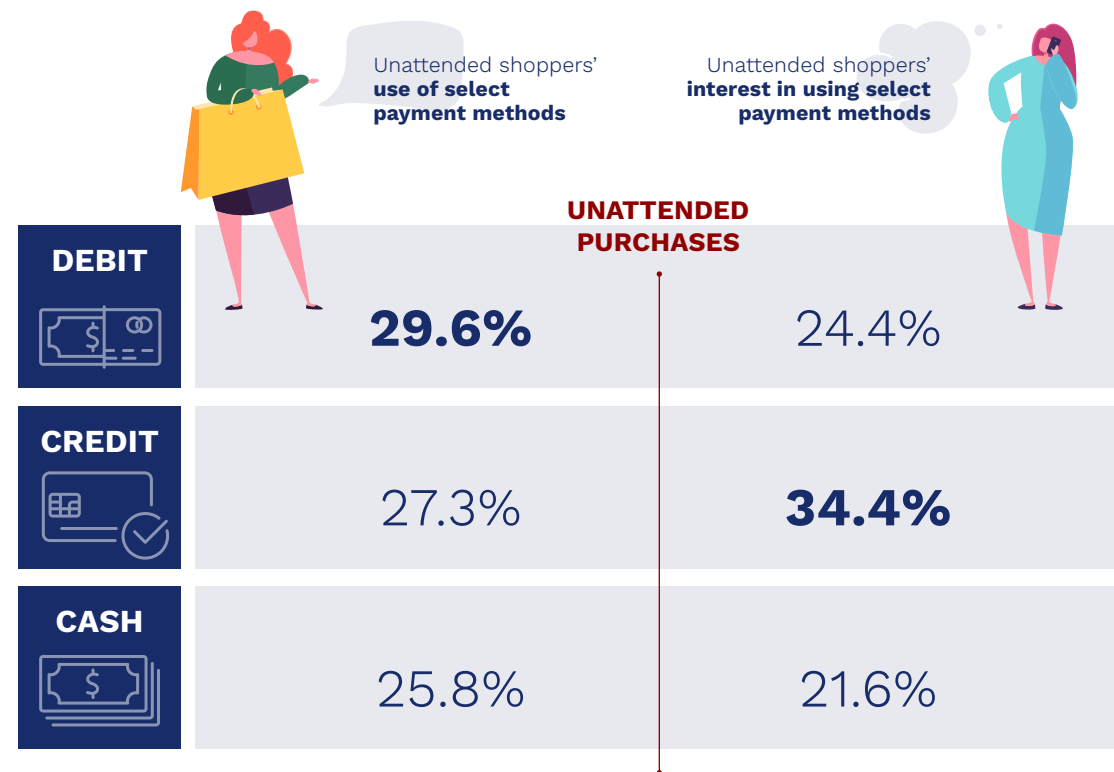


03

Unattended retail shoppers want to pay with credit but settle for debit.

Unattended retail shoppers use debit cards more than any other payment method, with 29.6 percent saying they used them to pay for their most recent unattended purchases. Credit cards are not far behind, though, as 27.3 percent of consumers used them to pay for their most recent unattended purchases. Traditional cash payments are also still common in the space, with 25.8 percent of unattended shoppers reporting that they used cash for their most recent purchases.

These unattended retail shoppers would use credit cards more often than debit cards if given the opportunity, however. Our findings suggest that 34.4 percent of consumers who are interested in non-traditional unattended retail shopping would like to use credit cards to pay for their purchases, making this method their top choice. Debit cards and cash are consumers' second and third most-preferred options, with 24.4 percent and 21.6 percent saying they would choose these payment methods for their unattended retail purchases.

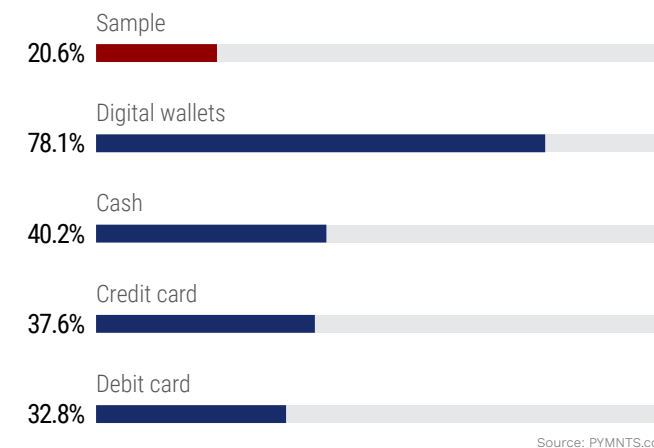


04

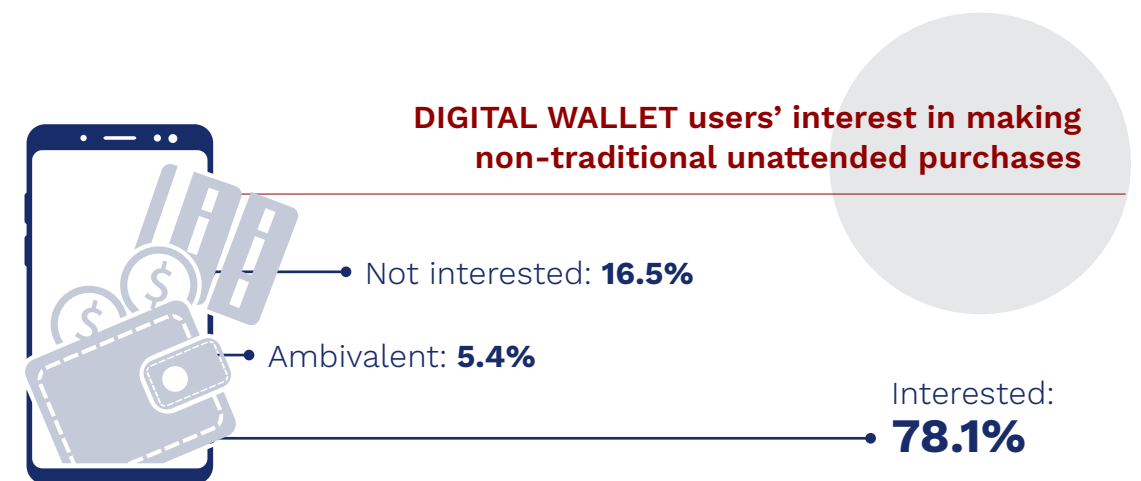
Few shoppers use digital wallets at unattended locations, but those who do love the payment experience.

Consumers who have paid with digital wallets are eager to use them again. Our survey shows that 78.1 percent who used digital wallets to make their most recent purchases would like to shop via unattended channels, compared to just 20.6 percent of consumers in general. This makes digital wallet users almost four times likelier than others to want to use unattended retail channels.

FIGURE 1:
Consumers' digital wallet use as it relates to their experiences with and interest in unattended shopping channels
 Share of unattended shoppers using select payment methods who are interested in unattended retail purchases



Digital wallet users value unattended shopping experiences so much, in fact, that 69.5 percent of them would be willing to pay more per purchase if they were given unattended shopping options.



05

Consumers who like unattended shopping would spend and pay more to experience it again.

Consumers who want to shop via vending machines or self-serve kiosks would not only pay more per purchase, but also make more purchases. Our research shows that 29.3 percent of consumers would make more purchases, and 24.6 percent would spend more per purchase when shopping at unattended locations than at traditional brick-and-mortar stores.

This affinity for unattended retail and willingness to spend more is even higher among consumers who have already experienced unattended retail solutions. We found that 39.4 percent of consumers who have previously shopped this way would be more likely to make unattended versus traditional purchases, and 30.9 percent would pay more to make such purchases again. This suggests that respondents who have made these purchases like the experiences and that the unattended retail market will grow as more consumers partake in unattended shopping.

06

The unattended retail market has realized just one-tenth of its potential.

Many consumers would like to make unattended retail purchases from self-serve kiosks, vending machines or cashierless stores, but only 11.8 percent of interested consumers currently make such purchases. Our research shows that approximately 48.6 million consumers (20.6 percent of the U.S. population) are interested in non-traditional unattended shopping experiences, but just 14.4 million (6.1 percent) make them. The disconnect between consumers' interest in and usage of such solutions suggests that some consumers do not use them simply because they are not available.

07

High-income consumers have the greatest demand for unattended commerce.

We see the largest growth potential among consumers in the highest income bracket we measured. Consumers who are interested in unattended shopping experiences are more likely to be in higher income brackets. Fifty-six percent of these consumers earn more than \$100,000 per year, 27.7 percent earn between \$50,000 and \$100,000 per year and just 16.3 percent earn less than \$50,000 annually. This presents a considerable growth opportunity for merchants that are willing to fulfill these consumers' unmet demands.

08

The health and beauty industries have the biggest unattended market growth potential.

Consumers are more interested in buying health and beauty products through unattended channels than any other product or service type, with 81.7 percent of consumers interested in making non-traditional unattended purchases saying they would like to buy health products and 64.1 percent saying they would like to buy beauty products. Clothing and accessories, books and magazines round out the top five, with 55.1 percent, 53.8 percent and 51.6 percent of consumers interested in making non-traditional unattended purchases saying they would like to buy these items, respectively.

The following pages delve further into our findings to examine just how far consumers' usage of and interest in unattended retail have expanded beyond traditional vending machines and into the realm of contextual commerce.

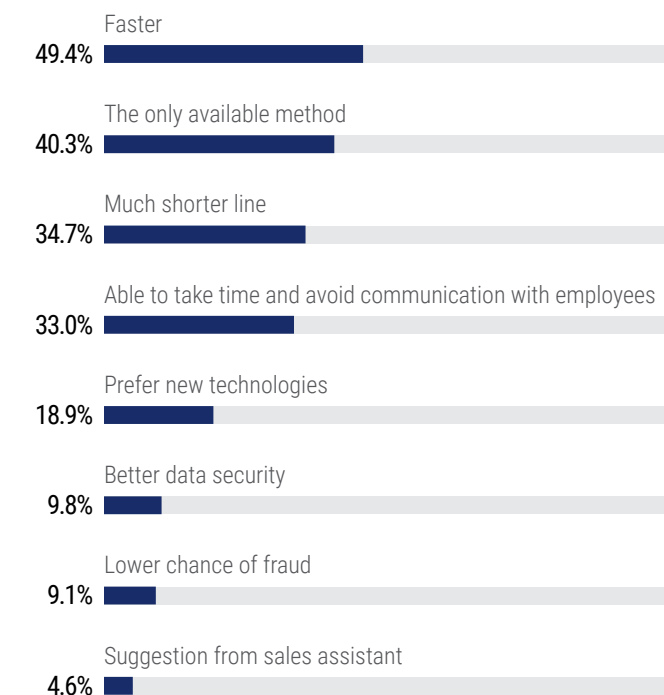
SHOPPING AT THEIR OWN PACES

It is no secret that consumers like fast and seamless shopping experiences, and this is especially true when they use unattended retail solutions. Two of the three reasons they commonly cite for seeking unattended retail options pertain to speed, with 49.4 percent saying they use such offerings because they are faster than employee checkout and 34.7 percent reporting they use them because lines are shorter.

Thirty-three percent of respondents say they prefer shopping at unattended retail locations because such options allow them to casually browse and purchase without interacting with employees,

FIGURE 2:
Consumers' reasons for using unattended retail channels

Share who use unattended retail channels for select reasons









Source: PYMNTS.com

49.4%
of unattended retail shoppers
use unattended channels
BECAUSE THEY ARE FASTER.

TABLE 1:
Consumers' reasons for using unattended retail channels

Share who use unattended retail channels for select reasons, by product or service

	 Clothing products	 Laundry services	 Computers and electronics	 Health and beauty products	 Food and beverages	 Vehicle services
Faster	36.0%	39.0%	18.5%	64.0%	56.2%	44.2%
The only available method	31.8%	49.1%	32.0%	21.7%	38.4%	55.9%
Much shorter line	44.2%	21.2%	50.0%	64.3%	34.4%	20.2%
Able to take time and avoid communication with employees	40.2%	30.2%	58.5%	37.6%	31.0%	28.7%
Prefer new technologies	20.8%	20.2%	26.5%	26.0%	19.9%	7.2%
Better data security	20.3%	10.8%	26.3%	10.4%	7.3%	6.1%
Lower chance of fraud	22.0%	7.0%	32.4%	10.3%	5.5%	8.4%
Suggestion from sales assistant	8.5%	3.9%	23.5%	0.0%	3.4%	5.1%

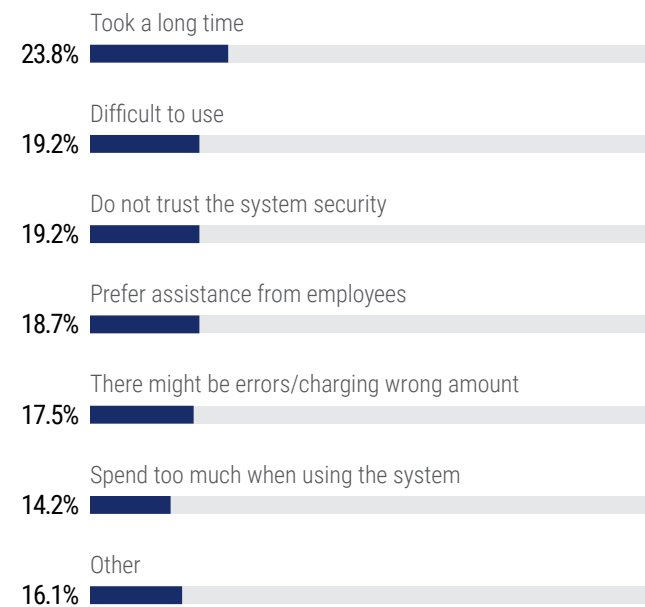
Source: PYMNTS.com

but their interest in using these channels to save or savor their time largely depends on the types of products being purchased. Sixty-four percent of respondents who buy beauty products via unattended channels say they do so because it is faster, for example, while just 36 percent of those who buy clothing and accessories and 18.5 percent of those who purchase computers or electronics say the same.

Time is also consumers' most-cited reason for being dissatisfied with their unattended retail experiences. Just 12.6 percent of unattended retail shoppers say they were dissatisfied with their most recent experiences, but 23.8 percent of these respondents say they were dissatisfied because the unattended experiences took too long. This underscores the importance consumers place on feeling in control of their time when using such solutions.

FIGURE 3:
Consumers' reasons for being dissatisfied with unattended retail channels

Share of dissatisfied consumers who cite select reasons for their dissatisfaction, by reason



Source: PYMNTS.com

Dissatisfied consumers also commonly report that they felt unattended terminals were hard to use (cited by 19.2 percent of respondents) and that they did not trust the systems to charge them the correct amount (17.5 percent).

Time is nevertheless the top issue on consumers' minds when they make unattended purchases, which means merchants that want to drive engagement would be wise to cater to customers' need for speed when offering unattended retail services.

23.8%
of dissatisfied shoppers were unhappy with **HOW LONG IT TOOK TO COMPLETE** their most recent unattended purchases.



CONTEXTUAL COMMERCE:

SHOPPING ANYTIME,
ANYWHERE

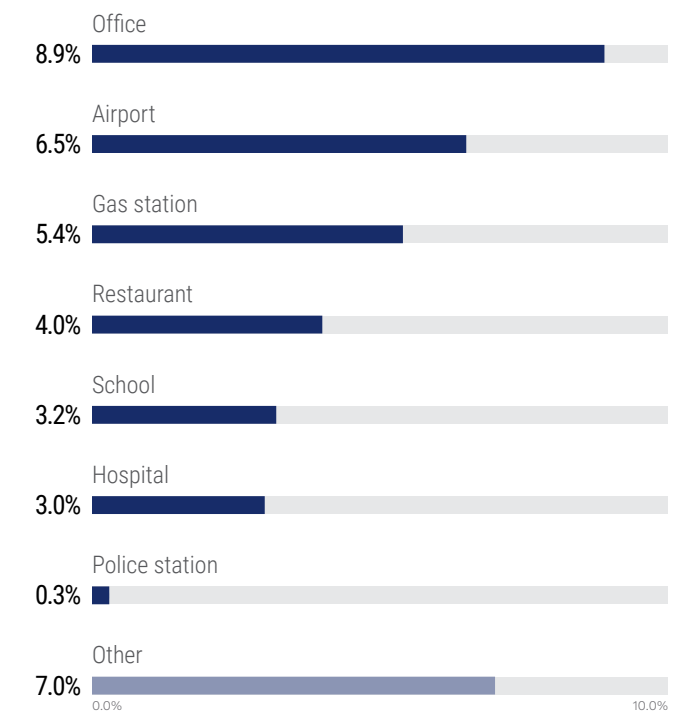
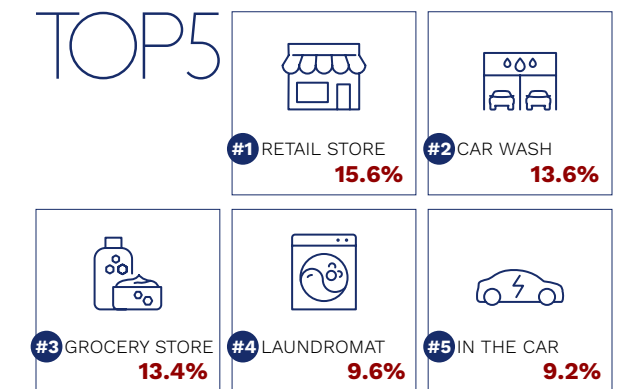
Speed and ease of use are two components that are crucial to providing attractive and engaging unattended shopping experiences, but it is also imperative to offer the right services in the right places.

We gauged consumers' unattended retail shopping preferences by asking our respondents where they shopped and how they paid. Our survey shows that 15.6 percent of unattended retail shoppers made their most recent purchases at physical stores that were unaffiliated with the products they bought, while 13.6 percent made unattended retail purchases at car washes and 13.4 percent did so at grocery stores. This makes sense, as car washes are typically self-service locations and U.S. grocery stores commonly feature unattended kiosks.

Consumers also commonly shop unattended at their workplaces (cited by 8.9 percent), laundromats (9.6 percent) and airports (6.5 percent). Many also report making unattended purchases from their cars at quick-service restaurants (QSRs) and at schools.

FIGURE 4:
Consumers' locations when making unattended retail purchases

Share who made their most recent unattended purchases at select locations



Source: PYMNTS.com

We see a surprising degree of variability in the likelihood of consumers from select income brackets making purchases at different locations, with laundromats providing one key example. Consumers earning less than \$50,000 annually are the most likely to make unattended purchases at laundromats, with 17.1 percent reporting they made their most recent purchases at such locations. This might include buying soap from vending machines or using cash or cards at payment-activated laundry machines.

This is almost three times more than the 6.2 percent of consumers earning over \$100,000 per year and the 6.3 percent of those making between \$50,000 and \$100,000 annually who say the same.

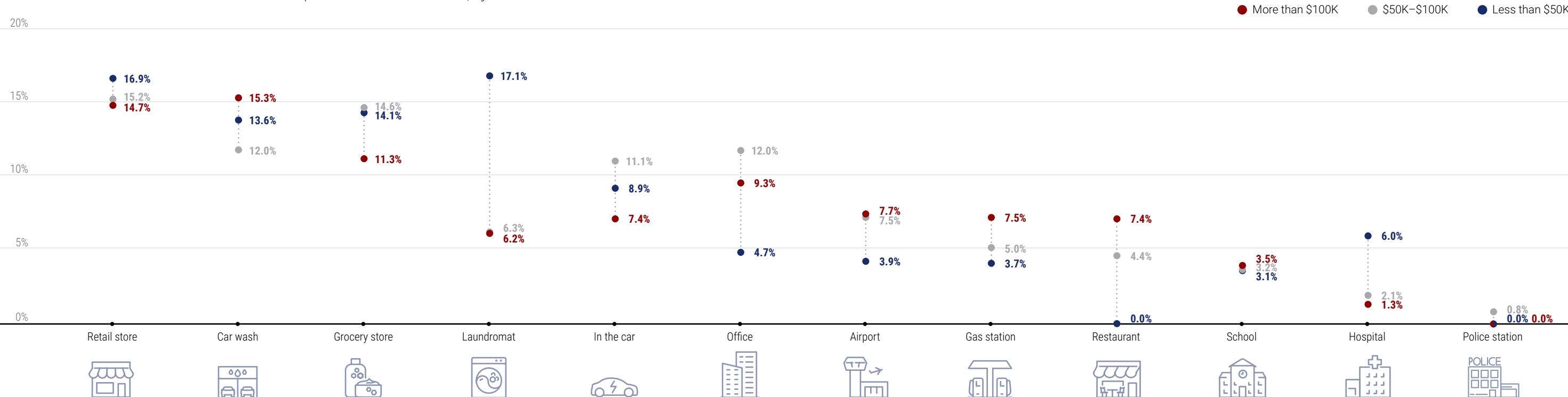
Consumers in the lowest income bracket are also considerably more likely to buy unattended retail items at hospitals. Those in the highest bracket are meanwhile the most likely to use unattended retail solutions at car washes, gas stations and QSRs.

Regardless of where unattended retail shoppers make their purchases, chances are they would like to pay for them via credit or debit card. Consumers' top three most-preferred unattended retail purchase payment methods are credit cards, debit cards and cash, respectively. Our survey shows that 34.4 percent of respondents who express interest in non-traditional unattended purchases would like to use credit cards, 24.4 percent would use debit cards and 21.6 percent would use cash for their purchases.

15.3%
of consumers earning more than \$100K per year made their most recent unattended purchases **AT CAR WASHES.**

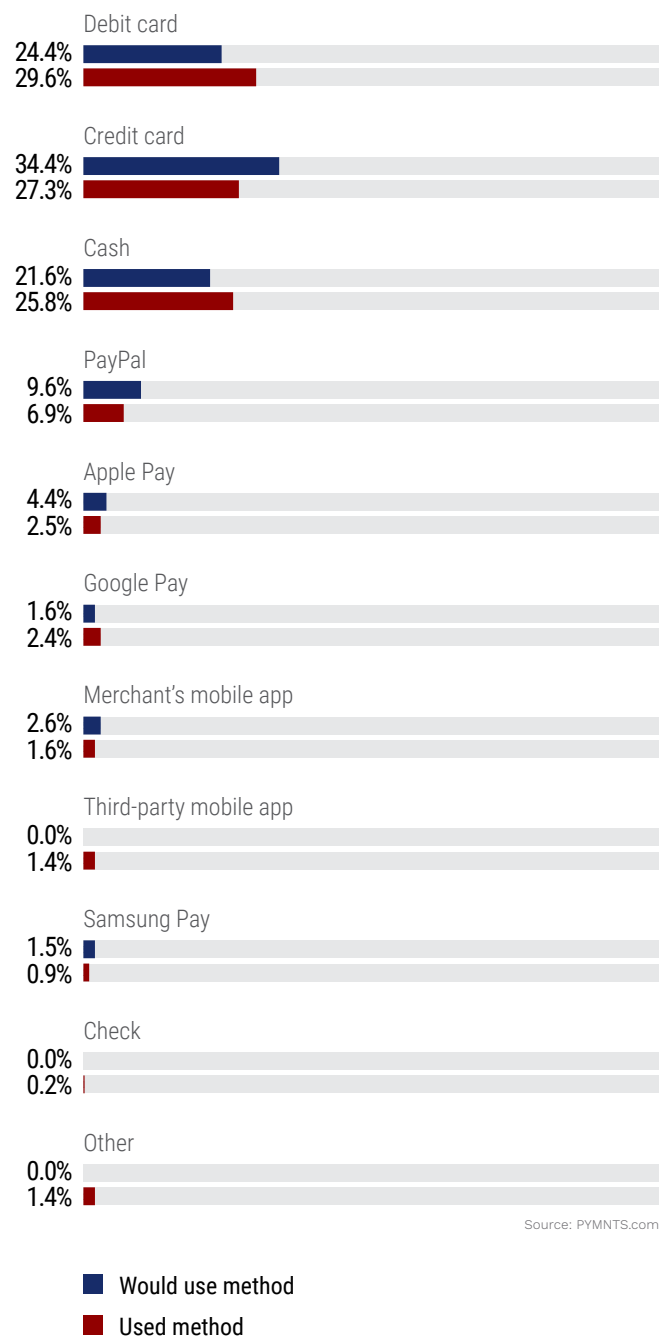
FIGURE 5:
Consumers' locations when making unattended retail purchases

Share who made their most recent unattended purchases at select locations, by income



Source: PYMNTS.com

FIGURE 6:
How consumers pay and would like to pay for unattended retail purchases
 Share of unattended retail shoppers who pay using select methods, by interest in versus usage of methods

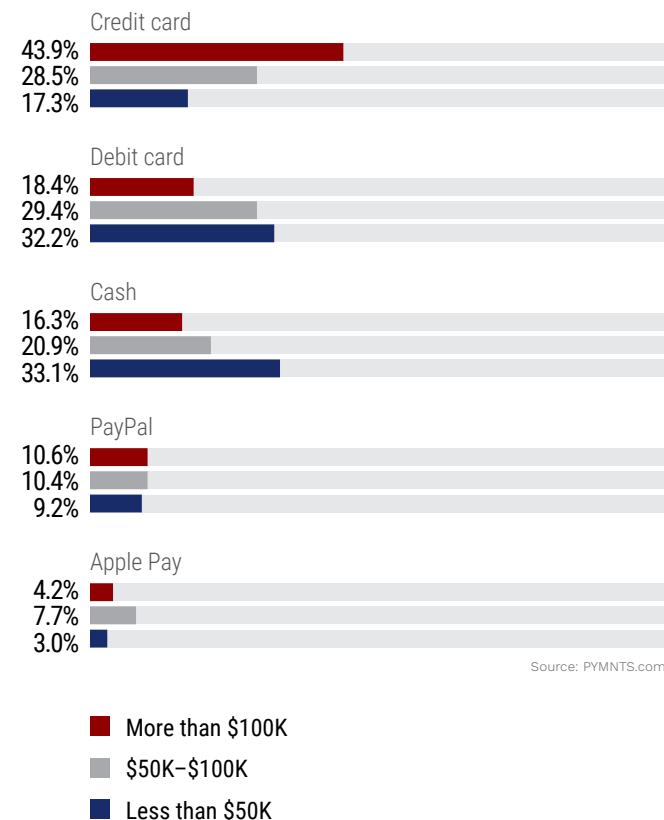


Consumers may prefer to use credit cards when they can, but not all unattended terminals accept them. The result is that debit cards are more commonly used to pay for unattended purchases, despite being consumers' second choice. Our research shows that 29.6 percent of consumers used debit cards to pay for their most recent purchases, while 27.3 percent used credit cards.

There are also many consumers who use mobile solutions to pay for unattended retail purchases. PayPal is the most commonly used mobile payment method, with 6.9 percent of consumers having used PayPal to make their most recent unattended retail purchases and 9.6 percent saying they would like to use the service.

Not all payment methods are equally popular among consumers from different income and age brackets, however. Credit cards may be unattended retail shoppers' most preferred way to pay, but we see an even stronger preference

FIGURE 7:
Different demographics' unattended retail purchase payment preferences
 Share of unattended retail shoppers who would like to pay using select methods, by income



for credit cards among consumers with the highest incomes. Our survey shows that 43.9 percent of unattended shoppers in the highest income bracket say they would prefer to use credit cards for unattended retail purchases, compared to 28.5 percent and 17.3 percent of consumers in the middle and lowest income brackets, respectively.

Cash is consumers' third choice overall for unattended retail payments, but it is the first choice for those in the lowest income bracket, cited by 37.7 percent of these consumers as their preferred method. This contrasts with those in the

43.9%
 of unattended retail shoppers
 earning more than \$100K per year
 would like to use
CREDIT CARDS to pay for
 unattended retail purchases.

TABLE 2:
Different demographics' unattended retail purchase payment preferences
 Share of unattended retail shoppers who would like to pay using select methods, by generation

	Generation Z	Millennials	Bridge millennials	Generation X	Baby boomers and seniors
Credit card	9.9%	33.7%	39.4%	36.4%	34.5%
Debit card	31.8%	20.0%	20.6%	29.6%	25.8%
Cash	33.4%	26.1%	21.8%	15.5%	18.2%
PayPal	9.8%	10.8%	8.9%	9.9%	9.6%
Apple Pay	11.0%	5.9%	4.7%	2.8%	3.6%

Source: PYMNTS.com

middle and highest income brackets, of whom 16.8 percent and 26.4 percent, respectively, would use cash.

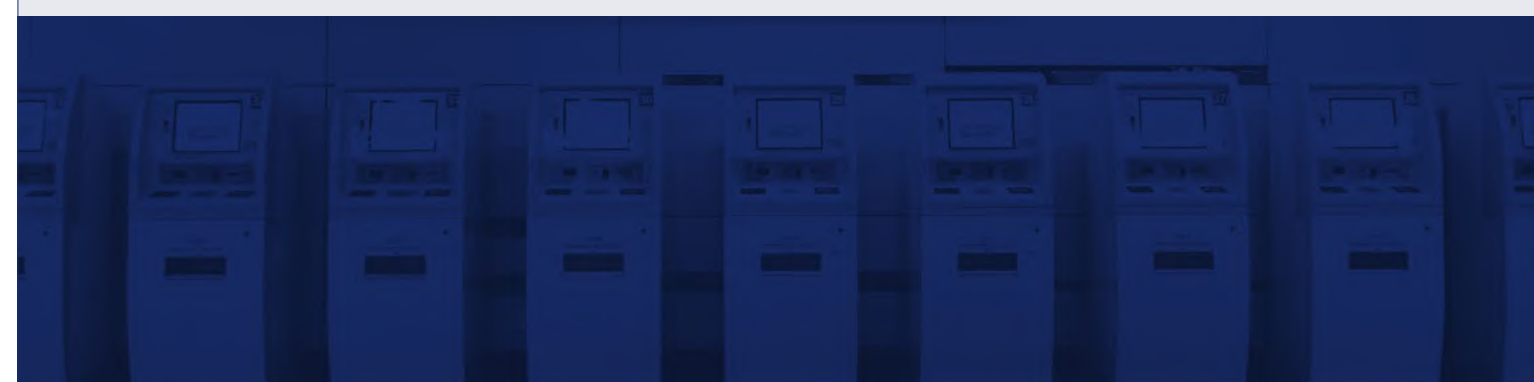
Consumers across different generations show distinct inclinations toward certain payment methods, as well. Millennials and bridge millennials are most likely to make unattended purchases with credit cards, and our research shows that 34.6 percent of the latter and 32.2 percent of the former would like to use them to buy unattended retail items. This contrasts

with the 21.5 percent of seniors and baby boomers and 22.2 percent of Generation Z consumers who say the same.

We found that seniors and baby boomers and Gen Z consumers are almost equally likely to pay for unattended purchases with debit cards, as this method is used by 40.6 percent of the former and 37.6 percent of the latter. This compares to just 24.5 percent of Gen X consumers and 25.2 percent of millennials who use this payment method.



Bridge millennials are a powerful cohort of consumers composed of both older millennials and younger Gen X members. They are between the ages of 30 and 40 and have grown up around computers, smartphones and tablets, meaning they are knowledgeable about digital technology and comfortable using it to browse, shop and pay. Bridge millennials tend to be more professionally established than their younger millennial and Gen Z counterparts, too, and they typically possess more disposable income. The average bridge millennial takes 18.3 shopping trips per year to buy apparel and accessories and spends an average of \$2,225 annually doing so. This contrasts sharply with baby boomers, who take just eight shopping trips and spend \$1,389 annually.









THE VENDING MACHINE AND BEYOND

Vending machines are the most recognizable unattended commerce channel, but consumers' demands for unattended retail options extend far beyond simply using kiosks to buy candy bars and soft drinks. Respondents report purchasing a wide array of products and

services through unattended retail channels. These can include laundry services, vehicle-based services like parking and air pumps, kiosks that sell clothing and computers and electronics.

Food and beverages represent the most common unattended retail purchases, and 52.3 percent of all consumers whose

TABLE 3:
Products consumers purchase via unattended retail channels
 Share of unattended shoppers who buy select products, by demographic

	 Clothing products	 Laundry services	 Computers and electronics	 Health and beauty products	 Food and beverages	 Vehicle services
AVERAGE	25.4%	26.6%	8.0%	20.6%	52.3%	29.2%
INCOME						
• More than \$100K	16.9%	24.6%	9.1%	19.0%	57.5%	31.1%
• \$50K-\$100K	31.7%	25.6%	10.4%	22.3%	53.1%	29.2%
• Less than \$50K	26.9%	29.7%	4.2%	20.3%	46.1%	27.2%
GENERATION						
• Generation Z	45.2%	18.8%	8.0%	7.8%	38.5%	39.7%
• Millennials	26.2%	26.7%	11.0%	24.9%	52.8%	26.3%
• Bridge millennials	30.7%	27.1%	9.5%	23.5%	60.0%	25.9%
• Generation X	24.1%	27.6%	6.9%	17.8%	61.8%	29.4%
• Baby boomers and seniors	19.1%	27.8%	5.0%	22.4%	43.5%	29.5%

Source: PYMNTS.com

38.4%
of consumers
who made their
most recent
purchases from
unattended channels
would like to use
these channels
to shop for
**NON-TRADITIONAL
VENDING PRODUCTS.**

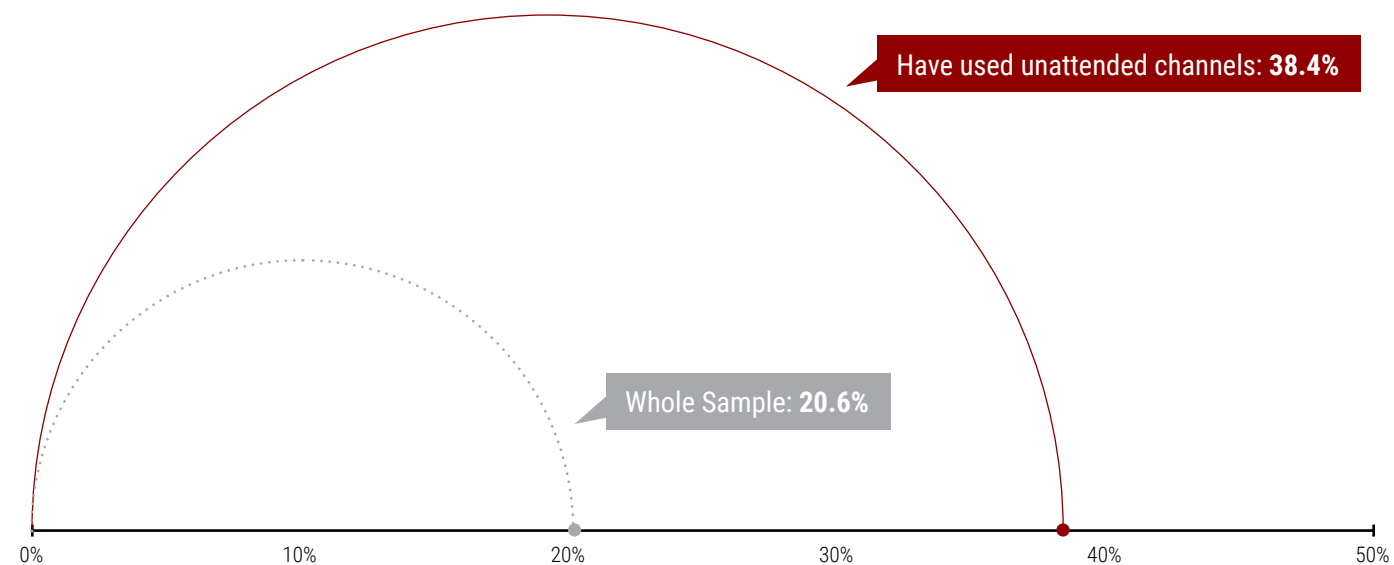
latest purchases were unattended reported buying such products. Vehicle and laundry services round out the top three, with 29.2 percent and 26.6 percent of unattended shoppers having made such purchases, respectively. We also see many unattended shoppers buying clothing (25.4 percent), health and beauty products (20.6 percent) and computers and electronics (8 percent).

A closer look shows that consumers' income levels and generational backgrounds often correlate with their propensity to make unattended purchases. Consumers in the highest income bracket are the most likely to say their latest unattended retail purchases were of food or beverages, while those in the lowest income bracket are the least likely to say the same. The reverse is true when it comes to laundry services, which are purchased by 24.6 percent of shoppers in the highest income bracket and 29.7 percent of those in the lowest. Unattended shoppers from the middle income bracket are those most likely to use such solutions to purchase clothing products (cited by 31.7 percent in this bracket), beauty and health items (22.3

FIGURE 8:

Consumers' interest in using vending machines to make purchases

Share who would like to purchase non-traditional items via vending machine



Source: PYMNTS.com

percent) and computers and electronics (10.4 percent).






These findings may suggest that the demand for non-traditional vending items such as clothing, health and beauty products, and computers and electronics is low among unattended retail shoppers — but this is not necessarily the case.

We asked respondents whether they would be interested in purchasing non-traditional items via the unattended retail channel with which consumers are

most familiar: vending machines. Their answers revealed consumers' broader interest in unattended retail offerings.

We found that 20.6 percent of consumers would be interested in using these machines to purchase non-traditional vending products, and the share of those who expressed such interest rose to 38.4 percent among consumers who have already purchased such products via unattended retail channels.

TABLE 4:
Purchases consumers would like to make via unattended retail channels
 Share of consumers interested in purchasing via unattended retail channels who would like to buy select products, by demographic

	 Health products	 Beauty products	 Clothes and accessories	 Books	 Magazines
AVERAGE	81.7%	64.1%	55.1%	53.8%	51.6%
INCOME					
• More than \$100K	83.5%	66.8%	55.1%	51.4%	51.7%
• \$50K-\$100K	78.7%	63.7%	60.3%	56.5%	53.7%
• Less than \$50K	80.3%	55.8%	46.2%	57.3%	47.3%
GENERATION					
• Generation Z	79.0%	61.9%	59.0%	47.8%	32.2%
• Millennials	77.3%	67.0%	60.9%	50.4%	43.2%
• Bridge millennials	81.2%	67.2%	59.4%	53.8%	47.1%
• Generation X	81.8%	65.7%	53.5%	57.3%	57.5%
• Baby boomers and seniors	90.7%	57.9%	45.0%	57.9%	69.2%

Source: PYMNTS.com

Consumers who express interest in purchasing non-traditional vending products through kiosks are most likely to say they would like to use vending machines to buy health products, cited by 81.7 percent. Respondents interested in non-traditional vending machine pur-

chases also commonly say they would like to buy beauty products (cited by 64.1 percent) and clothing and accessories (55.1 percent).

This is another area in which we see considerable variability in consum-

ers' preferences, however. The share of consumers interested in buying beauty products via vending machine, for example, varies from 55.8 percent among those in the lowest income bracket to 63.7 percent and 66.8 percent for those in the middle and highest income brackets, respectively.

Books are the only vending machine-enabled purchases consumers from the lowest income bracket are most likely to seek, with 57.3 percent of these consumers who express interest in shopping via vending machine saying they would make such purchases. This share is not much greater than the 56.5 percent of middle income and 51.5 percent of high income bracket consumers who say the same.

Different generations also seem to have different ideas regarding which types of purchases are best made via vending machines. Younger consumers tend to be more interested in using such solutions to purchase fashion-related items, while older consumers are more interested in buying health products and reading materials.

Seniors and baby boomers tend to be the most enthusiastic about using vend-

ing machines to buy health products, for example, with 90.7 percent expressing interest in doing so — a far greater interest level than those expressed by other age groups. They are also the least likely to express interest in purchasing clothing and accessories from vending machines, a desire cited by 45 percent.

Millennials are the least likely age group to express interest in using vending machines to buy health products, but they are the most likely to say they would like to use machines to purchase clothing and accessories. Among millennials who would be interested in making non-traditional vending purchases, 60.9 percent would like to buy clothing and accessories and 77.3 percent would like to buy health products.

Millennials and bridge millennials are also the two generational groups most likely to express interest in using vending machines to purchase beauty products. Sixty-seven percent of the former and 67.2 percent of the latter who are interested in non-traditional vending purchases say they would like to purchase such products, compared to 53.5 percent of Gen X and 45 percent of Gen Z consumers.

THE (UNATTENDED) RETAIL GROWTH OPPORTUNITY

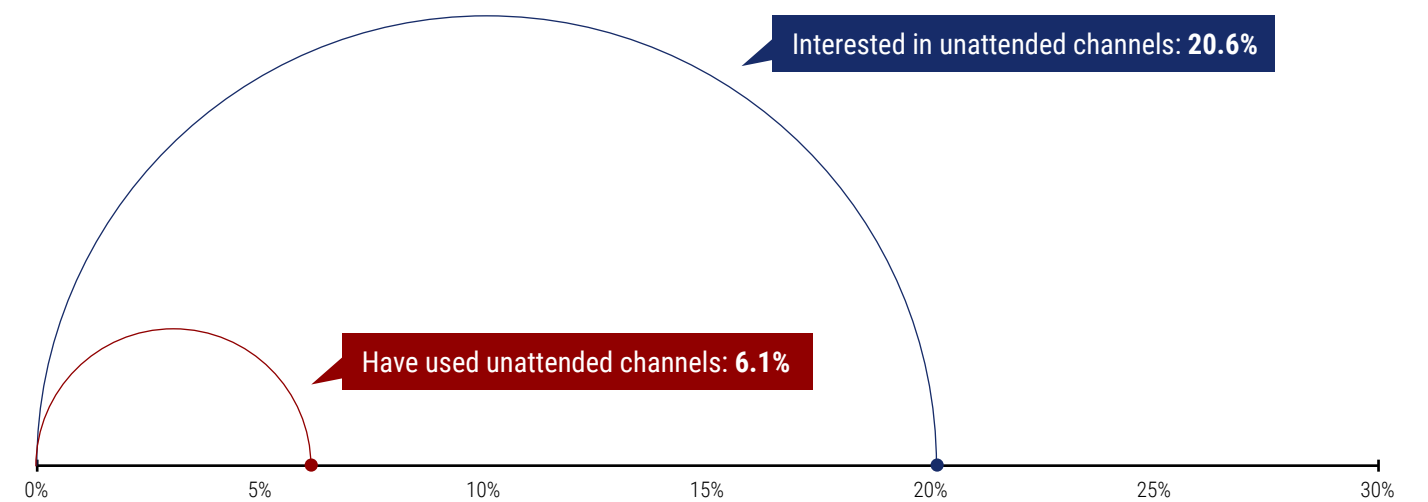
There exists massive growth potential in the unattended retail market. Our research shows that the current U.S. unattended retail market contains 14.4 million consumers (6.1 percent of the U.S. population), but as many as 48.6 million (20.6 percent of the U.S. population) are interested in buying non-traditional items via unattended retail channels. This suggests that the market could grow by as much as 70.4 percent if everyone who sought to make unattended retail purchases had access to them, representing a considerable opportunity for unattended retail merchants to expand their customer bases.

Providing unattended retail options would help merchants attract more customers as well as entice them to spend more money per purchase than they would at traditional brick-and-mortar terminals.

Among consumers whose latest retail purchases were unattended, 30.9 percent say they would spend more on their purchases if they had access to them through channels like vending machines, unattended kiosks and even unattended stores. The share is even higher among consumers who express interest in using unattended retail channels in the future, with 53.2 percent saying they would spend more on items if they were given unattended retail options.

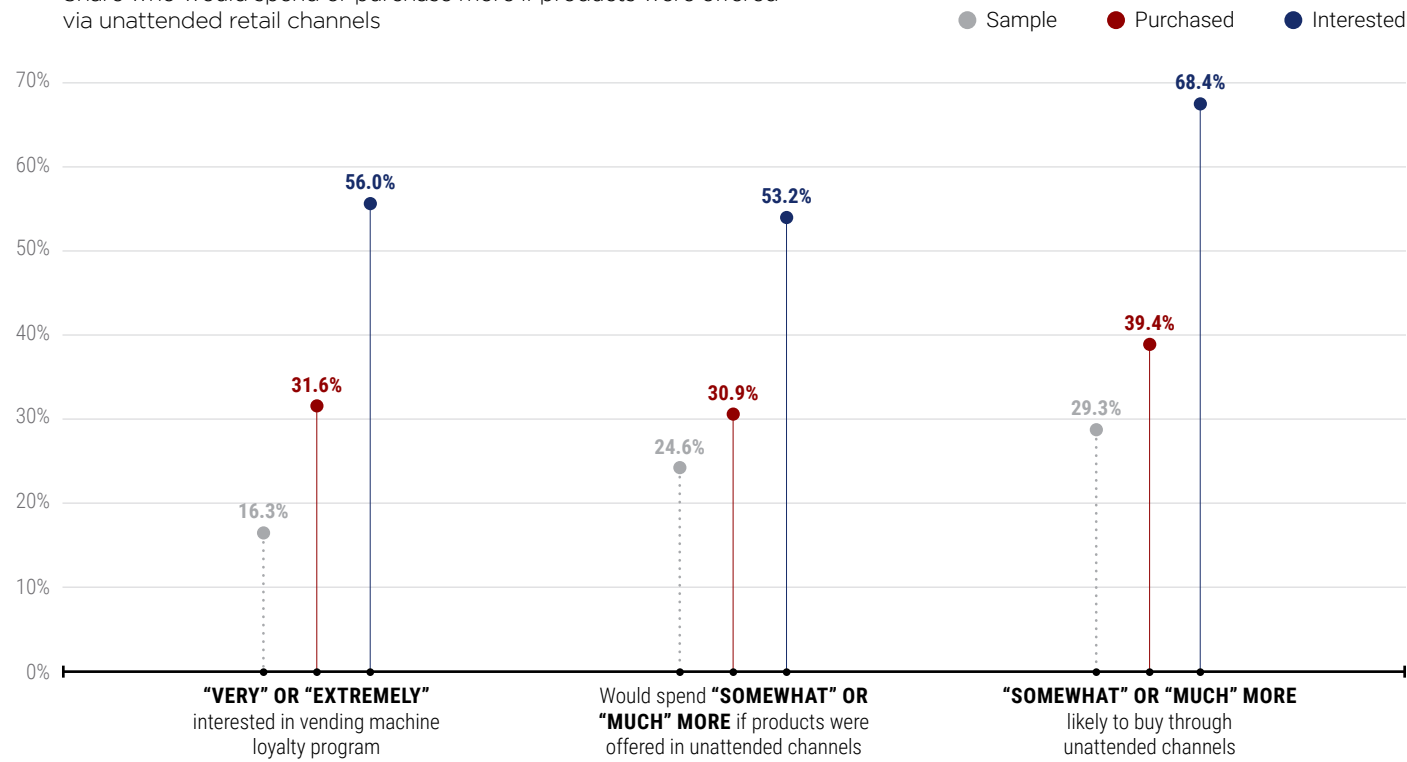
FIGURE 9:

Consumers' use of and interest in using unattended retail channels
Share who use versus would like to use unattended retail channels



Source: PYMNTS.com

FIGURE 10:
Consumers' propensity to buy and spend using unattended channels
 Share who would spend or purchase more if products were offered via unattended retail channels



Source: PYMNTS.com

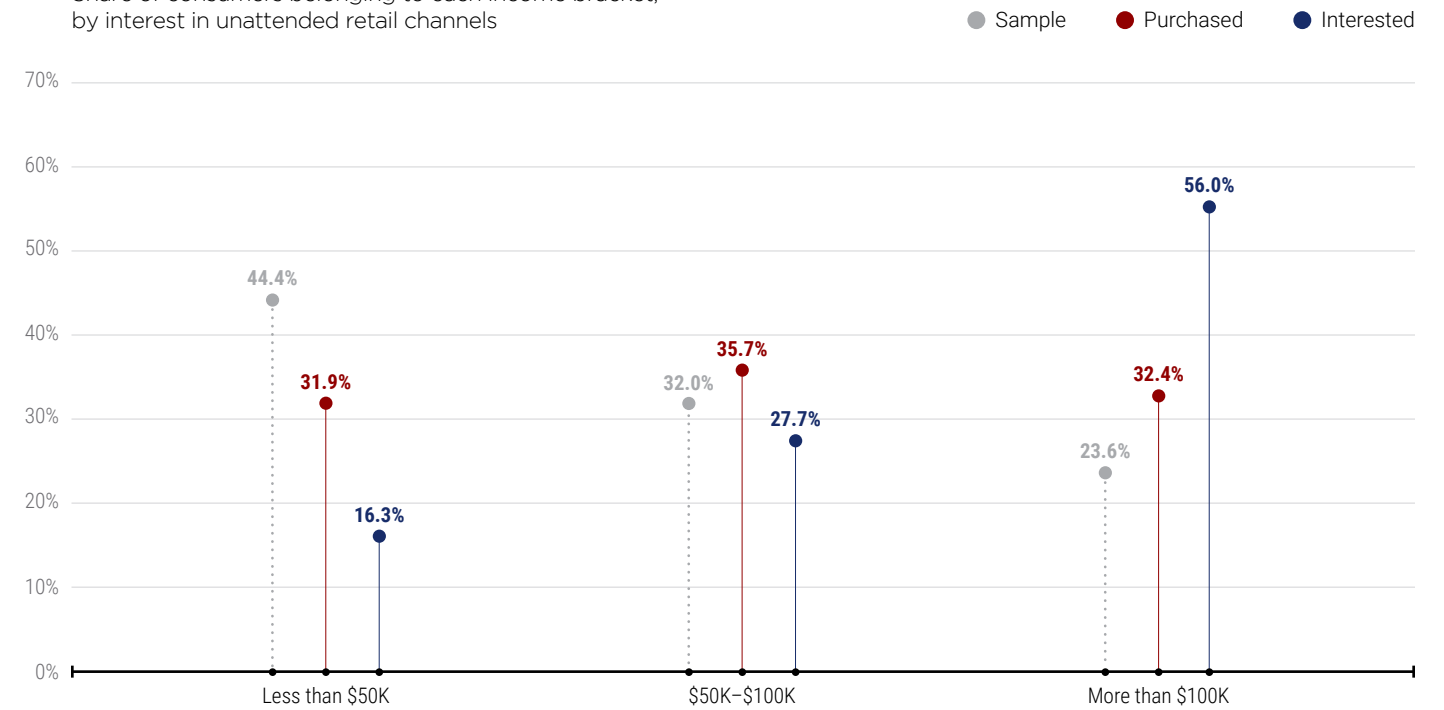
Consumers who have either used unattended retail channels in the past or would like to do so in the future are also likelier than the general population to express interest in vending machine loyalty programs.

Fifty-six percent of respondents who would be interested in using unattended channels in the future say they would be "very" or "extremely" interested in vending machine loyalty programs, and this portion is 31.6 percent among consumers

who have previously used unattended retail channels. Both of those shares are considerably greater than the 16.3 percent of our broader sample that express interest in such programs. It therefore seems that loyalty program offerings could go a long way toward attracting consumers who enjoy unattended shopping experiences.

It is also crucial to note that consumers who are interested in unattended retail options tend to hail from the high-

FIGURE 11:
Consumers' interest in unattended shopping experiences
 Share of consumers belonging to each income bracket, by interest in unattended retail channels



Source: PYMNTS.com

est income bracket. Fifty-six percent of those who say they would be interested in unattended purchases earn more than \$100,000 per year, while just 27.7 percent in the middle and 16.3 percent in the lowest income brackets say the same.

Despite high earners' interest in unattended shopping, they tend to have the least overall past experience shopping via unattended solutions. Our findings suggest that only 32.4 percent of their latest retail purchases were unattended.

This is on par with the share of those in the middle and lowest income brackets — at 35.7 percent and 31.9 percent, respectively — despite the fact that those in the highest bracket are most likely to express interest in unattended purchases. This indicates that many of these consumers do not have access to unattended retail terminals that provide either the items they wish to purchase or the user experiences they expect.



DIGITAL WALLETS ARE GETTING MORE POPULAR.

DEEP DIVE:

WHERE MOBILE MEETS UNATTENDED

Digital wallets are not the most common way consumers pay for unattended retail purchases, but they share a certain synergy with unattended retail technology. Many consumers find unattended shopping solutions' convenience and the time management control they allow appealing, and digital wallets can help deliver on these experiences.

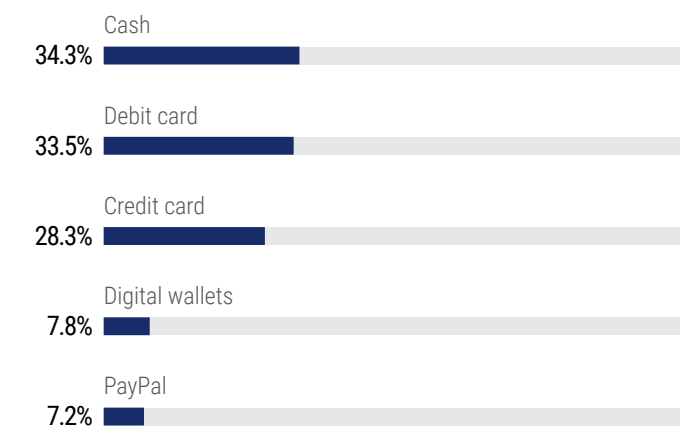
Just 7.8 percent of unattended retail shoppers report using digital wallets for their most recent purchases, but those who do cite high levels of satisfaction and tend to hail from either the mid- or high-income brackets. Our study shows that 44.6 percent of consumers who report using this method to pay for their most recent unattended retail purchases are from the middle income bracket, while 36.6 percent are from the highest and 18.8 percent are from the lowest. It is worth noting that those in the highest bracket are still less likely to use digital wallets than other payment methods, however.

Younger consumers also show a propensity to pay using digital wallets. The majority of digital wallet users are either millennials or bridge millennials, who

7.8%
of unattended retail shoppers made their most recent purchases with **DIGITAL WALLETS.**

FIGURE 12:
Consumers' usage of select payment methods for unattended retail purchases

Share of unattended shoppers who paid using select methods



Source: PYMNTS.com

make up 43.9 percent and 30.4 percent, respectively, of all consumers who paid for their most recent unattended retail purchases via digital wallets.

Gen Z is also fond of this payment method, as consumers from this age group represent 20.7 percent of all digital wallet users. This contrasts with seniors, baby boomers and Gen X consumers who collectively account for just 35.4 percent of unattended shoppers who used digital wallets to pay for their most recent unattended purchases.

FIGURE 13:
Consumers' usage of digital wallets to pay for unattended retail purchases
Share of consumers paying with digital wallets, by income bracket

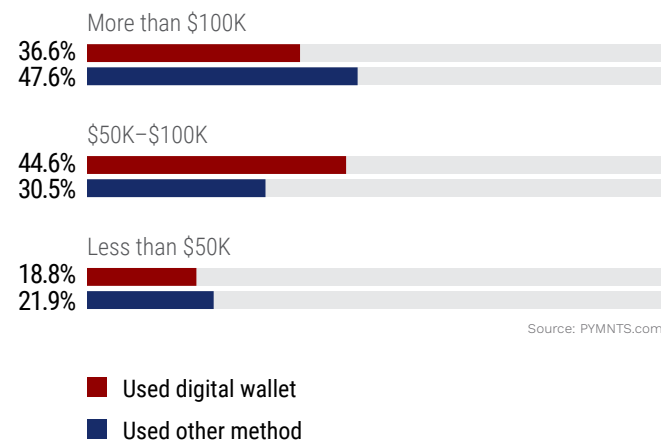
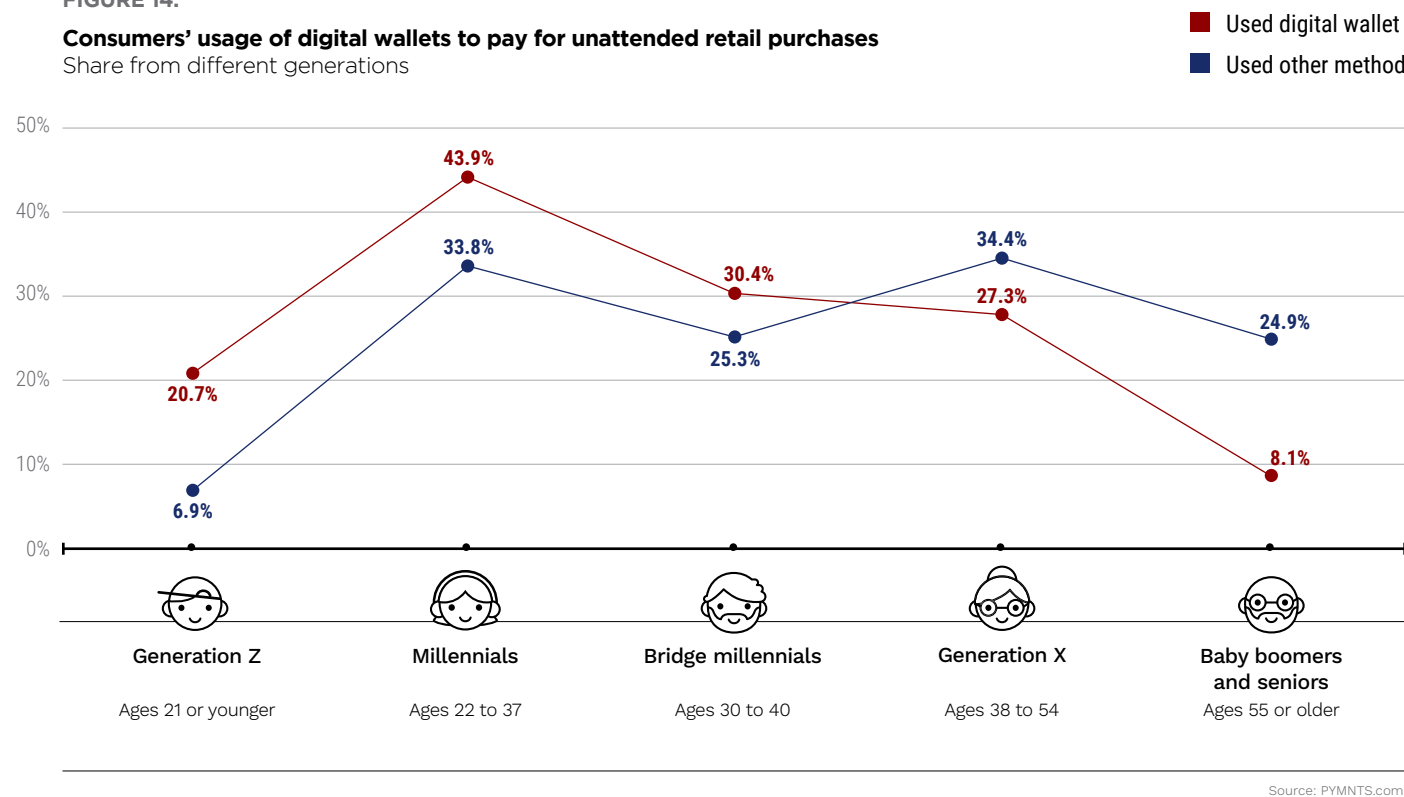


FIGURE 14:
Consumers' usage of digital wallets to pay for unattended retail purchases
Share from different generations



78.1%
of consumers who made their most recent purchases using digital wallets are **INTERESTED IN PURCHASING** non-traditional vending products via unattended channels.

We also see a strong correlation between consumers' digital wallet usage and their propensity toward making unattended retail purchases. Digital wallet users are more likely to shop via unattended channels than consumers who use any other payment methods, with 16.1 percent of those who used digital wallets to pay for their most recent purchases saying that those purchases were made at unattended terminals. This compares to just 12.3 percent, 9.5 percent and 9 percent of consumers who paid with debit, credit cards and cash who did so, respectively.

FIGURE 15:
Consumers' digital wallet use as it relates to their experiences with and interest in unattended shopping channels
Share of consumers expressing interest in unattended shopping experiences

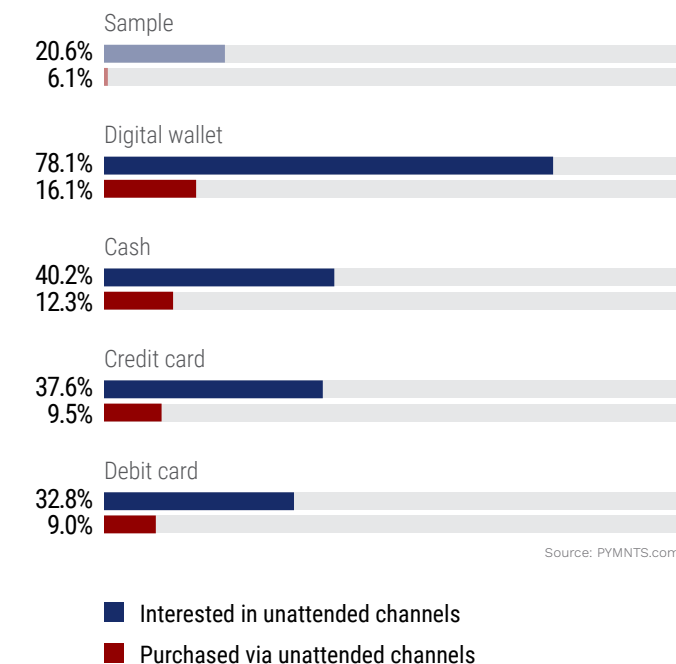
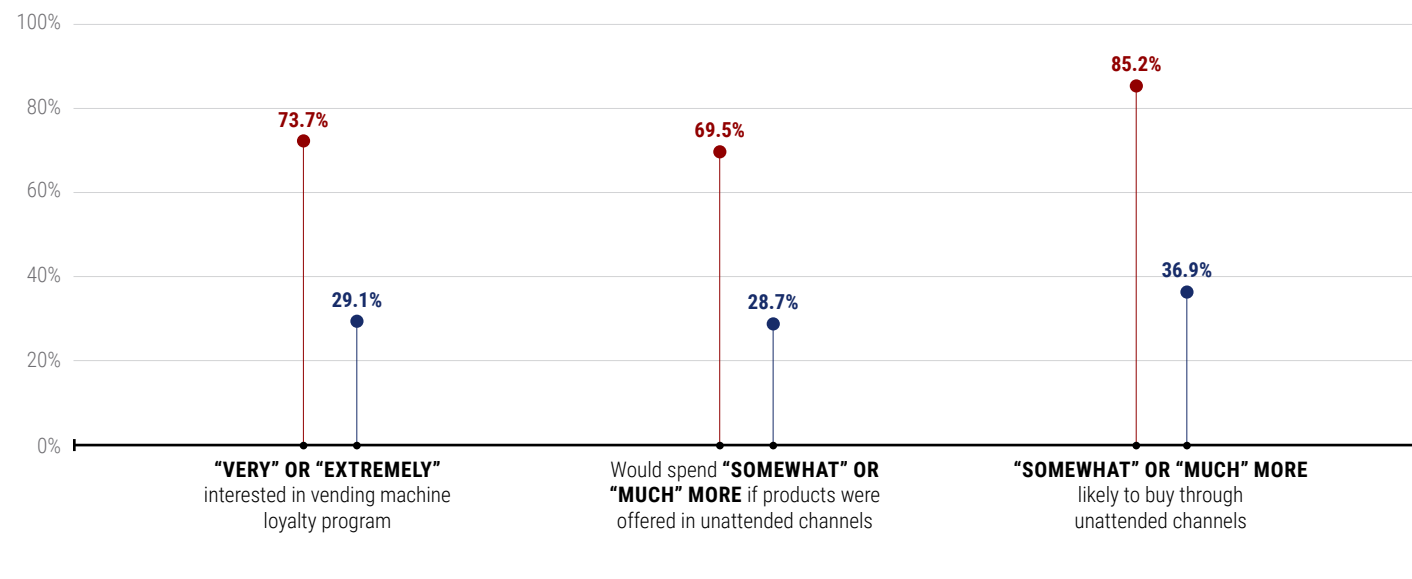


FIGURE 16:
Consumers' digital wallet use as it relates to their propensity to spend via unattended shopping channels

Share who would spend or purchase more if products were offered in an unattended retail channel, by interest in using digital wallets

● Used digital wallet ● Used other method



Source: PYMNTS.com

It is also worth noting that consumers report satisfaction with using digital wallets to pay for unattended retail experiences. Those who have paid using digital wallets in the past are eager to use them again, and they are almost four times as likely as the general population to express interest in leveraging them for future unattended purchases.

Our survey shows that 78.1 percent of consumers who used digital wallets to pay for their most recent unattended purchases say they would be interested in

using them to buy non-traditional items, while just 20.6 percent of our overall sample says the same. Merchants looking to bolster their unattended consumer engagement would thus do well to offer digital wallet options, as doing so could go a long way toward providing the quick, seamless payment experiences that can transform one-time buyers into loyal customers.

Digital wallet options would also cater to consumers who are more likely to use — and pay to use — unattend-

ed retail channels. Our research shows that 85.2 percent respondents who used digital wallets to pay for their most recent unattended retail purchases would be “somewhat” or “much” more likely to use unattended retail solutions than any other channels, while 69.5 percent would spend “somewhat” or “much” more on purchases made through unattended channels.

Among consumers who did not use mobile wallets to pay for their most recent unattended purchases, 36.9 percent say they would be more likely to buy via unattended options than any other channels, and just 28.7 percent say they would be willing to spend more if they could use unattended channels to pay for purchases.

Once these consumers have engaged with mobile wallet-enabled unattended terminals, merchants can leverage rewards programs to entice them to make return purchases. Mobile wallet users show strong interest in vending machine loyalty programs, with 73.7 percent expressing interest in them. Only 29.1 percent of the general population says the same.

85.2%
of consumers who made their most recent unattended retail purchases using digital wallets are **“SOMEWHAT” OR “MUCH” MORE LIKELY** to buy products offered through unattended channels in the future.

CONCLUSION

Most retailers are focusing on online and brick-and-mortar stores, but they appear to be missing out on a huge opportunity. Unattended retail represents a new channel through which merchants can reach customers and boost sales. Just 14.4 million U.S. consumers currently shop at unattended retail locations, but another 48.6 million would like to do so. What's more, consumers who have previously made unattended retail purchases are eager to do so again.

Competitive retailers would be wise to tap into this opportunity by offering unattended shopping options where customers are most likely to want to buy their products, providing the payment options consumers prefer and ensuring convenient, fast and seamless shopping experiences they can find nowhere else.

METHODOLOGY

PYMNTS collected survey response data from 2,325 U.S. consumers regarding their unattended retail purchase experiences, the types of payment methods they value for those experiences and their interest in using such channels in the future. We then divided respondents into groups based on their annual incomes and generational backgrounds, allowing us to analyze how consumers' familiarity with and interest in different unattended retail solutions varied across demographics. The Future of Unattended Retail Report details the findings from our extensive research.



SAMPLE



Purchased in unattended retail



Interested in unattended retail

	2,325	51.6%	32.2%	46.9	33.4%	30.8%	35.8%
N	2,325						
FEMALE		51.6%					
COLLEGE		32.2%					
AVERAGE AGE		46.9					
LESS THAN \$50K		33.4%					
BETWEEN \$50K AND \$100K		30.8%					
MORE THAN \$100K		35.8%					

Source: PYMNTS.com

EXECUTIVE INSIGHT

Digital tools such as data analytics and machine learning have redefined contextual commerce, making it possible to customize consumers' experiences to degrees that were previously impossible. Matthew McConnell, chief operating officer of USA Technologies, explains how this personalization can change the unattended retail game?

The personalization unattended retail offers creates an experience that traditional retail can't match — [delivering] what consumers want, when they want it, where they want it. There are several examples I talked about recently in the podcast with PYMNTS' Karen Webster. Think about people traveling on a plane. The airline already knows I am in seat 7A. I can order a beer from my seat and not have to worry about paying because they already have my credit card, so it gets billed directly. That frictionless experi-

ence is what people crave in their busy lives. The benefits are many: Thanks to data, retailers can create a personalized experience without having to have a live person; advertisers have a captive audience in the moment of purchase, creating opportunities to upsell and cultivate shoppers; and shoppers get experiences tailored to their wants and needs, also in the moment. Retailers now have the ability to drive profitability through less expense and more flexibility; consumers get viable experiences that are satisfying and potentially create loyalty.



ABOUT

PYMNTS.com

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 companies in payments share relevant information about the initiatives that make news and shape the future of this dynamic sector. Our data and analytics team includes economists, data scientists and industry analysts who work with companies to measure and quantify the innovations at the cutting edge of this new world.



USA Technologies, Inc. is a cashless payments and software services company that provides end-to-end technology solutions for the self-service retail market. With over 1 million connections worldwide, USAT is transforming the unattended retail community by offering one solution for payments processing, logistics and back-office management solutions. The company’s enterprise-wide platform is designed to increase consumer engagement and sales revenue through digital payments, digital advertising and customer loyalty programs, while providing retailers with control and visibility over their operations and their inventory. As a result, customers ranging from vending machine companies, to operators of micromarkets, gas and car charging stations, laundromats, metered parking terminals, kiosks, amusements and more can run their businesses more proactively, predictably and competitively. For more information, please visit www.usatech.com.

We are interested in your feedback on this report. If you have questions, comments or would like to subscribe, please email us at unattendedretail@pymnts.com.

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