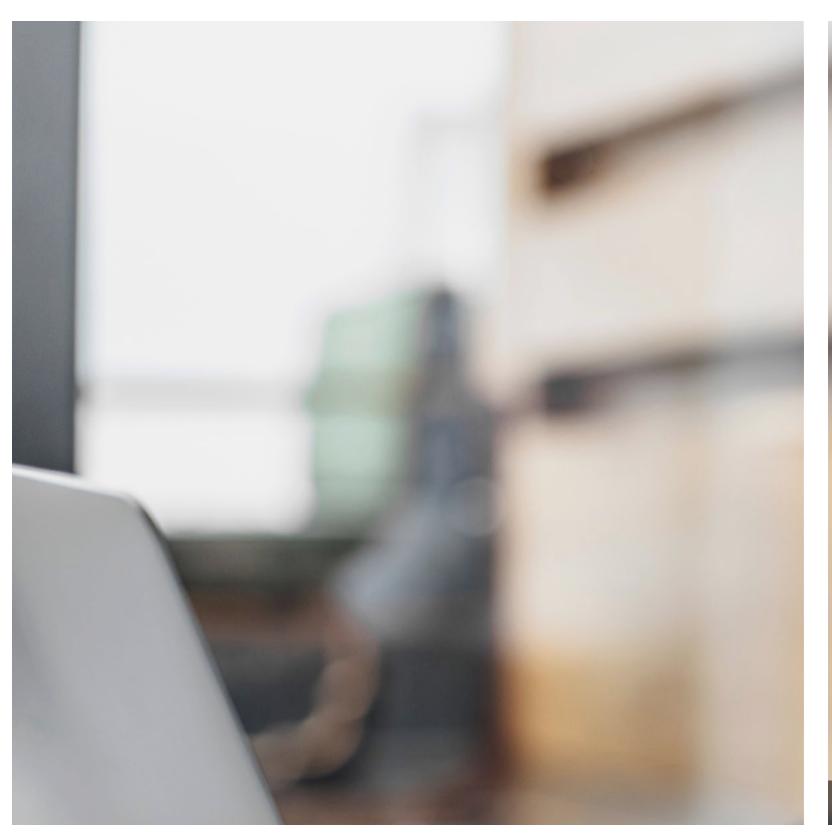
The Building Better App Playbook: The Card User Preferences Edition, a PYMNTS and Ondot collaboration, examines consumers' use of debit and credit cards and its relation to the demand for better mobile digital services. The report is based on a survey of more than 3,000 U.S. cardholders.





BUILDING ABETTERAPP

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ow consumers prefer to pay for things says a lot about them. Do they use cash as much as possible? Do they charge everything to their credit cards, or do they only use debit cards? These payment preferences reflect different priorities. Those who always reach for their debit cards may be more scrupulous about spending within their means, while regular credit card users might prioritize being able to purchase items immediately — whether out of necessity or impulse — or may be trying to rack up points for cash back or other incentives.

There is one thing these two types of cards have in common in the current

social and economic climate: They have become almost exclusively the main forms of consumer payment as much of the economy migrates online, spotlighting mobile card apps' value. Card apps can help users feel more secure in their online spending by sending transaction alerts that provide spending insights and making it easy for users to report lost cards or suspected fraud, for example. Consumers are interested in applying mobile card management tools in different ways, however.

PYMNTS has been tracking card apps' potential in its Building Better App series, a collaboration with Ondot based on a survey of more than 3,000 United States

cardholders. This edition, The Card User Preferences Edition, focuses on how card use preferences, spending and demographic factors relate to consumers' use of and interest in mobile card apps.

We identified three personas based on consumers' payment preferences in our analysis:

- **Debit-centric:** those who primarily use debit cards for purchases
- Credit-centric revolvers: those who primarily use credit cards and carry balances each month
- Credit-centric transactors: those who primarily use credit cards and pay off their entire balances each month

PYMNTS' research reveals that card apps may offer particular value to debit-centric consumers and credit-centric revolvers groups that tend to be younger and have tighter finances. They appeal to these groups in varying ways, however, as debitcentric users are particularly interested in mobile tools that make managing their cards more convenient, while creditcentric revolvers are more focused on gaining greater control over their finances. What these two groups have in common is their importance for banks, especially smaller ones that more commonly issue debit cards and must work to stay relevant to younger, digitally oriented consumers.

Here are the key findings from our research:

Debit-centric consumers and credit-centric revolvers are the most avid users of card apps currently on the market.

Our research shows that 72.6 percent of debit-centric consumers report having downloaded a mobile card app, while only 64.9 percent of credit revolvers have done the same. A considerably smaller portion of credit-centric transactors have downloaded card apps: 48.6 percent. Credit-centric revolvers who have downloaded card apps stand out as their most active users: 65.4 percent use them most of the time for their card management activities, compared to 61.4 percent of debit-centric consumers who do so.



Large shares of these two groups are interested in downloading "better" card management apps.

Close to half of debit-centric card users and credit-centric revolvers are "very" or "extremely" interested in downloading apps that offer wide-ranging tools that allow them to control and manage their cards. Our research found that 51.2 percent of credit revolvers are highly interested in downloading a prototypical "better app," as are 46.1 percent of debit-centric consumers. This number is 43.9 percent for the whole sample. Interest is more muted among credit transactors, 31.4 percent of whom would be highly interested in the better app.



Credit-centric revolvers prioritize greater financial control in card apps, while credit transactors are more focused on convenience.

The reason 63 percent of credit-centric revolvers most often report willingness to switch to financial institutions (FIs) that offer better apps is that the apps would give them more financial control. Credit-centric transactors are more likely to point to easier card management, which 70.6 percent cite as a reason for switching. We found that 65.8 percent of debit-centric card users cite easier account management and 58.8 percent cite greater control as motivators.



Credit-centric revolvers are interested in an exceptionally wide range of app features, including financing and spending management tools.

A majority of credit-centric revolvers are interested in nine distinct app features, while only the three most popular app features — reporting cards lost or stolen, reporting fraudulent transactions and setting transaction notifications — are of interest to more than half of the other personas. Credit-centric revolvers have notably high interest in tools that could help keep financing costs and spending in check: 57.9 percent are interested in payment plans for large purchases, making this one of the most attractive features for this group, and 51.4 percent are interested in tools that offer spending insights. Just 49 percent of debit-centric consumers and 29.9 percent of credit-centric transactors are interested in this latter feature.

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Credit-centric revolvers are considerably more inclined than debit-centric consumers to switch to FIs that offer better card apps.

Our research indicates that credit-centric revolvers are the most likely group to switch FIs in pursuit of better card apps: 39.5 percent consider themselves at least "somewhat likely" to do so. That share was 28.7 percent for debit-centric users and 20.3 percent for credit-centric transactors. These differences grow even more pronounced when we examine key subgroups, such as frequent app users: 56.5 percent of credit-centric revolvers who are frequent app users would be likely to switch FIs, while just 36 percent of debit-centric frequent app users would do the same.

06

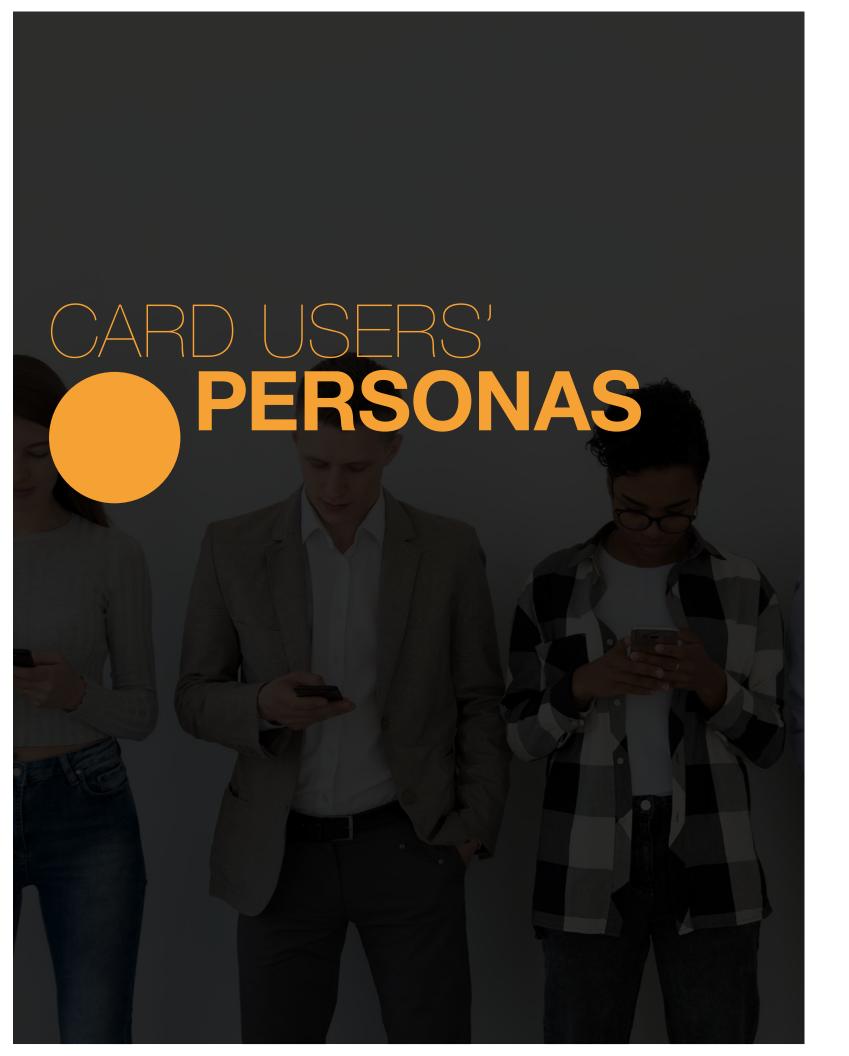
Greater spending levels on cards corresponds to stronger interest in card apps, but only to modest degrees.

Consumers who spend more on their cards are have a greater interest in better card apps than those that spend less, but this is a far less significant factor than card use preference or age group. Among "big spenders" — those who use their cards for \$750 in purchases or more per month — 46.1 percent are "very" or "extremely" interested in downloading a better card app. We found that number was just 40.6 percent for "light spenders" — those that spend less than \$750 in purchases each month. Consumers' card use preferences have a greater bearing on card app interest than spending power. Big spenders are more likely to be interested in every card app feature than light spenders, but the differences are not dramatic and are narrowest among those that can inform purchasing decisions.

39.5%

OF CREDIT-CENTRIC REVOLVERS WOULD CONSIDER SWITCHING TO FIS WITH BETTER CARD APPS,

COMPARED TO **20.3 PERCENT** OF CREDIT-CENTRIC TRANSACTORS.

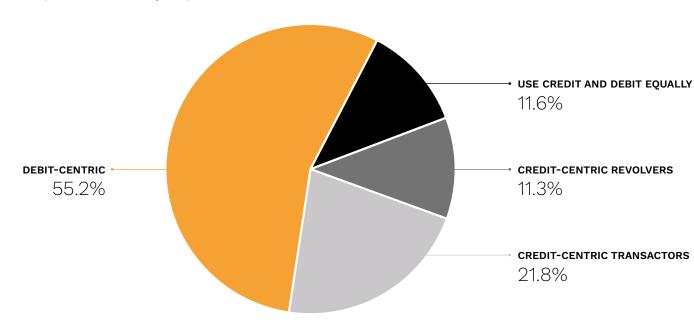


redit cards have become ubiquitous in the U.S. in terms of where they are accepted and the portion of consumers that have access to them. Our research found that debit cards remain the most commonly used payment method, however. Those who primarily use credit cards make up a significant, albeit smaller, share of consumers. This finding suggests that keeping spending in line with account balances is a priority for many consumers, whether by choice or necessity. These differences relate significantly to how consumers use

card apps and what they are looking for in better ones.

Debit-centric consumers make up 55.2 percent of the sample, credit card users represent 33.1 percent, and another 11.6 percent use both types of cards equally. Credit-centric transactors make up the largest share of credit card users, at 21.8 percent, while revolvers represent 11.3 percent. The two most common card use personas, credit-centric transactors and debit-centric, thus share an interest in using cards without taking on debt.

FIGURE 1: Card use persona distribution Share of personas within survey sample



The differences between these two groups come into sharper focus when examining their demographics. Credit-centric transactors tend to be older and wealthier than other groups, while credit revolvers stand out for their relative youth. Debit-centric card users tend to have lower incomes but are more evenly distributed across age groups.

We found that 55.9 percent of creditcentric transactors make more than \$100,000 per year and that 53.1 percent are baby boomers or seniors. Debitcentric consumers make less money, as 36.8 percent of them earn less than \$50,000 annually, and they can be found in roughly equal measure among baby boomers and seniors, millennials and consumers from Generation X.

TARLE 1: Demographic breakdown of card use personas Persona distribution within select income and age groups

DEMOGRAPHIC DATA	CARD USE PERSONA		
	Credit-centric revolvers	Credit-centric transactors	Debit-centric
GENERATION			
Generation Z	4.0%	2.2%	11.5%
• Millennial	34.7%	20.1%	28.4%
Bridge millennial	26.6%	17.8%	21.3%
Generation X	34.2%	24.7%	31.0%
Baby boomers and seniors	27.1%	53.1%	29.2%
ANNUAL INCOME			
• Less than \$50K	26.2%	15.2%	36.8%
• \$50K to \$100K	34.8%	28.9%	33.4%
More than \$100K	39.0%	55.9%	29.8%

Two key characteristics emerge in the case of credit-centric revolvers: their high concentration of millennials and their relatively high incomes. Millennials represent 34.7 percent of this persona and 26.6 percent are "bridge millennials" — a generational subset between the ages of 32 and 41 that tends to have more earning power than their younger peers. The largest share of credit-centric revolvers, 39 percent, make more than \$100,000.

This suggests that credit-centric revolvers may have more complicated financial needs than other groups. They are relatively wealthy, yet they also use cards to finance purchases they may not have the funds to cover. This may help explain one of the main themes in our research: Consumers with more complex or demanding financial lives have the greatest interest in card apps, and interest is more muted among those who are more financially comfortable.

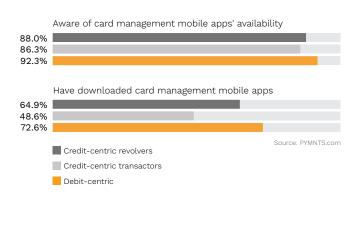
34.7%

CREDIT-CENTRIC REVOLVERS ARE MILLENNIALS.

FIGURE 2:

Personas' use of card apps

Share of personas who are aware apps are available and have downloaded them



Frequency with which personas use apps for card management



These trends are reflected in personas' current card app use. Debit-centric consumers are the most likely to report having downloaded card apps, at 72.6 percent. This is notably higher than the portion of credit-centric revolvers who have done so, 64.9 percent, as well as credit-centric transactors, at 48.6 percent.

There is an interesting distinction between debit-centric consumers and creditcentric revolvers when it comes to the actual use of card apps. Both groups tend to use the apps regularly to manage their cards, but credit-centric revolvers are more avid users: 65.4 percent report using them "most of the time" for their card management activities, compared to 61.4 percent of debit-centric consumers.

Credit-centric revolvers and debit-centric consumers are the most active card app users, but this does not mean that they are entirely satisfied with what is offered.

72.6%

OF DEBIT-CENTRIC CARD USERS HAVE DOWNLOADED CARD APPS,

BUT ONLY 48.6 PERCENT OF CREDIT-CENTRIC TRANSACTORS HAVE DONE SO.

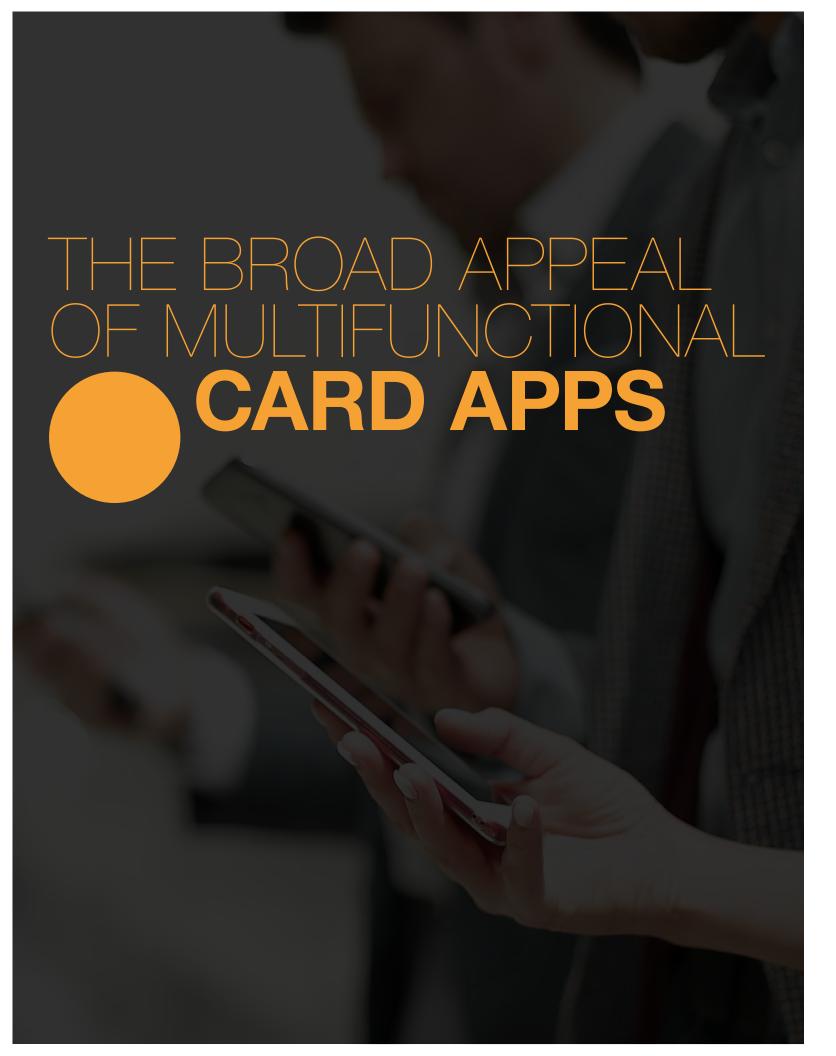
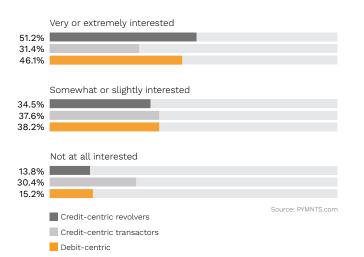


FIGURE 3:

Card use personas' interest in downloading the better app

Share of personas citing select interest levels in downloading the app



umerous mobile card apps have launched in recent years, each with varying degrees of functionality. PYMNTS' research has shown that most apps are unlikely to offer a wide spectrum of features. Most allow users to adjust their settings for notifications and alerts and to report cards lost or stolen, but features like location controls and spending insights are rarer.

We presented survey respondents with a hypothetical "better app" that had wide-ranging functions and could be used with multiple cards and in conjunction with a banking app. What cards consumers use and how - their card use personas — relate strongly to their attitudes toward the better app and its specific capabilities.

Our research reveals that current app use corresponds to interest in better ones. Debit-centric individuals and credit-centric revolvers are personas most likely to be interested in downloading a better app, with 51.2 percent of revolvers "very" or "extremely" interested. Our findings show that 46.1 percent of debit-centric users report the same interest levels. Credit-centric transactors are least likely to be interested: 31.4 percent are highly

interested, while 30.4 percent are "not at all interested."

These interest levels carry over into the specific features of the better app. Debit-centric users and credit-centric revolvers are more likely to want broad arrays of features than credit-centric transactors. Credit-centric revolvers are interested in close to seven features.

on average, while debit-centric users are interested in nearly six and creditcentric transactors express interest in approximately four features.

The features that pique different personas' interests are telling. Payment plans for large purchases are of interest to 57.9 percent credit-centric revolvers, making it one of the most popular tools for this

FIGURE 4: Personas' interest in card app features Share interested in specific features, by persona

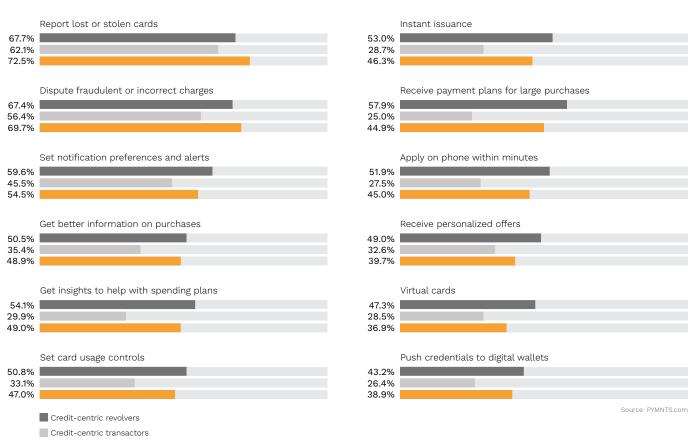


FIGURE 5:

Personas' interest in card app features

Average number of features in which personas show interest

CREDIT-CENTRIC REVOLVERS



CREDIT-CENTRIC TRANSACTORS



DEBIT-CENTRIC



Source: PYMNTS.com

ON AVERAGE,

CARD APP FEATURES

ARE OF INTEREST TO

CREDIT-CENTRIC REVOLVERS.

group. Purchase-specific payment plans could be an attractive option for this balance-carrying group that may typically have to pay high monthly interest rates. We found that 54.1 percent of credit-centric revolvers also have elevated interest in features that offer spending insights, compared to 49 percent of debit-centric consumers and 29.9 percent of credit-centric transactors.

Two other features are notably popular with both credit-centric revolvers and debit-centric users. Majorities of both groups are interested in setting preferences for notifications and alerts — 59.6 percent and 54.5 percent, respectively - and significant shares find getting information about purchases compelling: 50.5 percent and 48.9 percent, respectively.

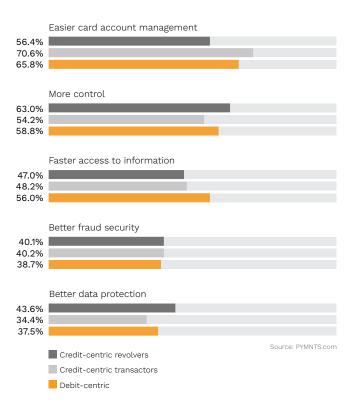
Better card apps are not idle concerns for significant shares of consumers: 28.5 percent would be willing to switch FIs if it meant they could access a better app. Switching behavior relates closely to card use personas and what they find

Debit-centric

FIGURE 6:

Reasons better apps would motivate personas to

Share citing select reasons for switching, by persona



most compelling in better card apps. The paramount attraction of a better card app for credit-centric revolvers is having more control — a key consideration for a group that must manage expenses that sometimes, if not regularly, exceed incomes. Sixty-three percent of credit-centric revolvers cite greater financial control as a reason a better app would motivate them to switch Fls.

Card apps' greatest attraction for creditcentric transactors is easier card management, with 70.6 percent of this group citing it as the key reason they would switch. Debit-centric bank switchers' motivations fall between the other two personas, but they tend to value easier account management over control: 65.8 percent cite the former as a reason for switching, and 58.8 percent cite the latter. Debit-centric users also appreciate being able to access information quickly, with 56 percent citing it as a reason why a better app would prompt them to switch.

The degree to which better card apps could prompt consumers to switch FIs relates to card use personas in familiar ways. Credit-centric revolvers are more likely than other groups to be interested in switching: 39.5 percent would be

likely to do so, as would 28.7 percent of debit-centric users and 20.3 percent of credit-centric transactors.

The switching potential grows larger when we focus on key subgroups: those who have downloaded card apps, those who are frequent users and those who are interested in downloading a better app. It is perhaps not surprising that those who already use card apps or are interested in doing are also more likely to be interested in switching FIs, but the differences are far more dramatic among credit-centric revolvers. Our research shows that 56.5 percent of credit-centric revolvers that already use card apps often would be interested in switching banks. That number is a remarkable 63.8 percent for those who are also interested in downloading the new app.

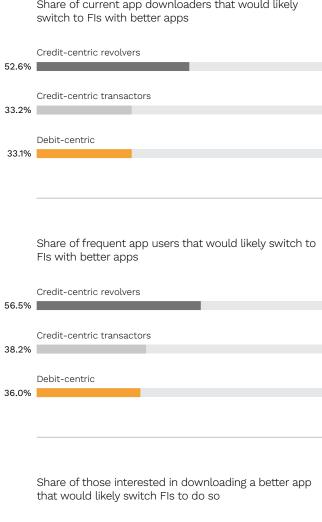
Debit-centric users diverge from creditcentric revolvers when it comes to willingness to switch FIs to access better card apps. The shares of debit-centric users within the key subgroups that would be interested in switching are only moderately higher than they are for the group as a whole: 33.1 percent in the case of current app downloaders, 36 percent for frequent users and 46.6 percent for 70.6%

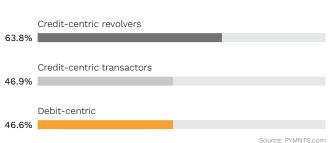
CREDIT-CENTRIC TRANSACTORS CITED **EASIER CARD MANAGEMENT** AS A REASON FOR SWITCHING FIS.

FIGURE 7:

FI switching potential among key subgroups

Share of current app downloaders that would likely





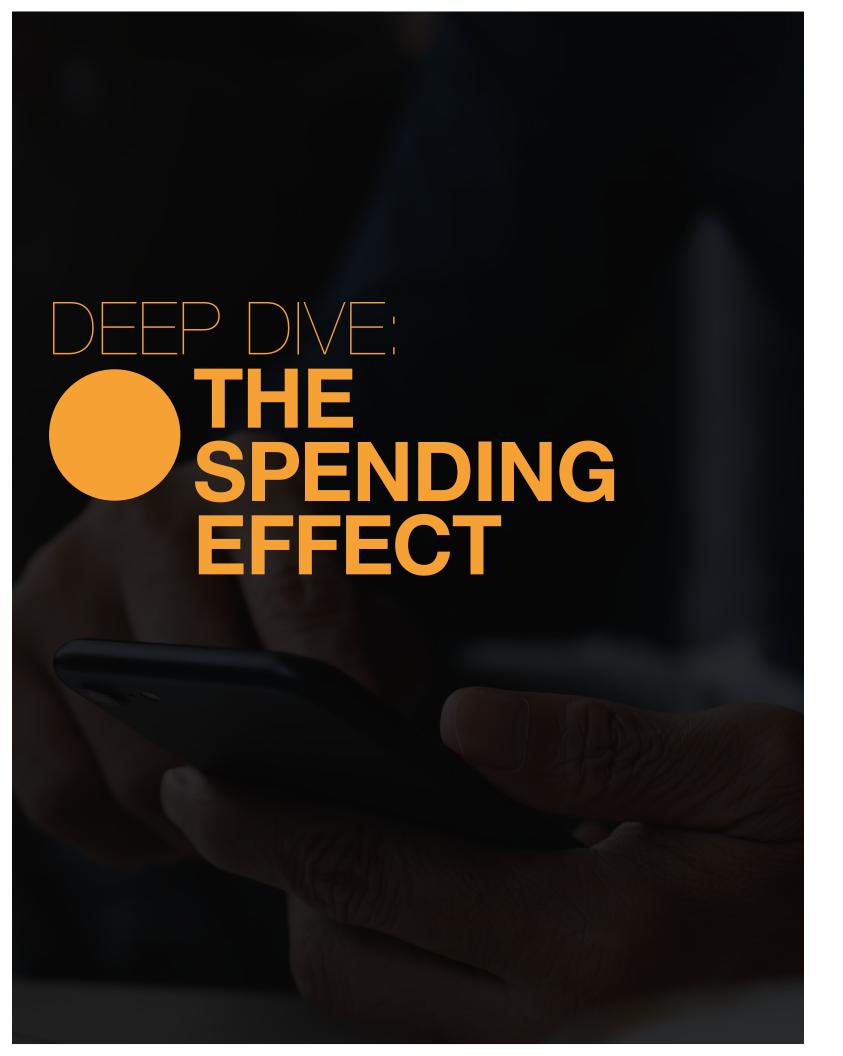
those interested in downloading a better app. These levels are notably higher in all cases for credit-centric transactors - a departure from the pattern showing this group has the least enthusiasm for card apps.

This indicates that debit-centric card users are not as willing as credit card users to decamp to another FI, even though they are highly interested in card apps overall. This makes sense when one considers that debit cards are typically linked to bank accounts: Switching banks is a more significant move than switching credit cards. This could provide a distinct advantage to debit-card issuing banks, as their customers are more likely than those of credit-card issuers to look to them first for better mobile services. It is thus incumbent on these banks to offer high-quality mobile card management tools to avoid losing significant shares of their customers.

33.1%

OF DEBIT-CENTRIC CARD USERS WHO HAVE DOWNLOADED CARD APPS **WOULD BE WILLING TO SWITCH FIS,**

> WHEREAS **52.6 PERCENT** OF CREDIT-CENTRIC REVOLVERS WITHIN THIS GROUP WOULD BE WILLING TO SWITCH FIS.



Inancial management services are typically associated with individuals who have higher net worth, as higher-income consumers are more likely to avail themselves of such services. Card apps may have a democratizing effect, as our research shows that the card use personas with tighter finances - debit-centric users and credit-centric revolvers — are both the most active card app users and the most intrigued by better apps.

The following Deep Dive examines this phenomenon from another perspective: spending levels, regardless of card use persona or income. We divided the sample further based on how much they purchase monthly on their debit and credit cards:

46.1%

OF BIG **SPENDERS** ARE HIGHLY INTERESTED IN **DOWNLOADING BETTER CARD APPS.**



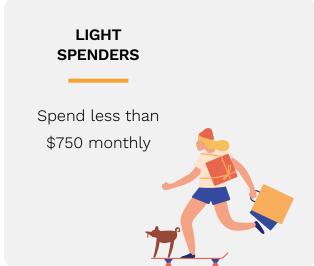


FIGURE 8:

Spending levels and current card app downloads

Share indicating an app is available and that they have downloaded it, by spending

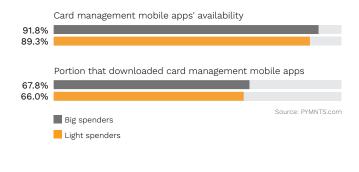
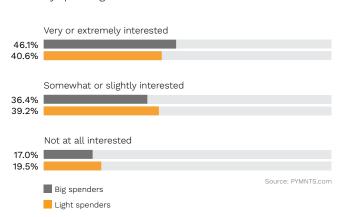


FIGURE 9:

Spending levels and interest in a better app

Share citing interest levels in downloading a better app, by spending



Our research shows that spending levels correspond to higher use of and interest in card apps, but only to modest degrees. Consumers who spend more on their cards are likely to perceive greater value in card management apps. This is similar to what would be expected from runners and fitness apps: One would expect avid runners to have greater interest in apps than casual ones.

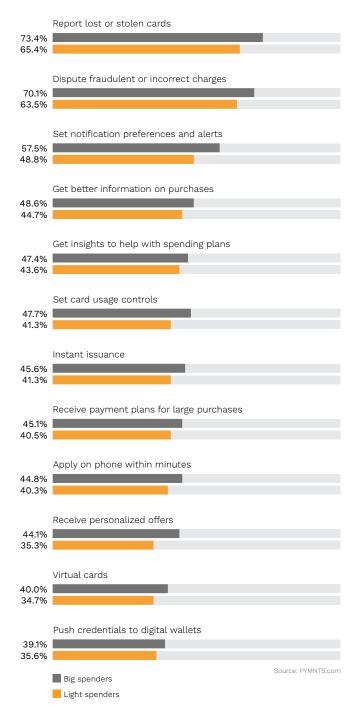
Spending is by no means a determining factor when it comes card app use and appeal, however. Big and light spenders are remarkably similar in their current card app use: 67.8 percent of big spenders report having downloaded card apps, as have 66 percent of light spenders.

The two groups also have similar levels of interest in a better app, but big spenders are somewhat more likely than light spenders to describe themselves as "very" or "extremely" interested — 46.1 percent of the former did, compared to 40.6 percent of the latter.

FIGURE 10:

Spending levels and interest in a better app

Share citing interest levels in downloading a better app, by spending



The greatest distinction between these two groups emerges when we assess their interest in the better app's specific features. Big spenders are more likely to be interested in every feature than light spenders — a broad indication that this group is more enthusiastic about the better app's capabilities. The differences are not dramatic, however, and they are narrowest when it comes to those that can inform purchasing decisions. We found that 48.6 percent of big spenders are interested in features that offer better information about purchases, compared to 44.7 percent of light spenders.

The data further shows that the features big and light spenders favor are remarkably close, indicating that the two groups have similar priorities in the tools they value. These data points should be considered alongside earlier findings showing that the highest income groups have lower interest levels in card apps than middle-income earners. It is not how much consumers make that determines their interest in card apps — which cards they use and how much they spend on them are far more significant factors.



CONCLUSION

redit and debit cards have become the linchpins of consumers' financial lives. Consumer commerce has shifted almost entirely to online and digital channels as a result of the COVID-19 pandemic, and these realities have revealed the value of mobile card apps. Mobile card management tools can help consumers keep track of their spending, ensure their accounts are not being misused and supercharge their cards with capabilities like location controls, spending insights and purchase-based payment plans.

There is no one-size-fits-all card app, however. What consumers are looking for in card apps relates closely to their own finances and spending styles. PYMNTS' research reveals two personas for whom card apps offer particular value: debit-centric consumers and credit-centric revolvers. Debit-centric users are keenly interested in mobile tools that make managing their cards easier and more convenient and that provide them with

faster access to account information. They have high interest in features that allow them to set notifications and report cards lost or stolen. Credit-centric revolvers are more interested in tools that give them greater control over their finances, such as spending insights and payment plans.

Banks would be wise to heed to debitcentric users' attitudes. These consumers represent the largest card use group, and our research also shows them to be the most likely to have already downloaded card apps. They are also more likely to be interested in highly functional "better apps" that can be used with multiple cards. This represents a potential advantage for smaller banks that issue debit cards, since these card users are less likely than other personas to switch FIs to obtain better apps. Banks that fail to offer compelling and functional card apps risk not only losing their customers' cardassociated revenues but also the entirety of their banking business.



METHODOLOGY

book: The Card User Preferences
Edition is based on a survey of
3,187 U.S. consumers. The sample was
balanced to match the U.S. census as
closely as possible, and the survey contained 50 questions, including a series
based on a minute-long video depicting a prototype of a mobile card app. We
received 5,004 total responses, 598 of
which were eliminated because they did
not match the parameters of our study.
Approximately 1,200 responses were discarded because they were incomplete or
contained inconsistencies.

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.

Ondot Systems is the creator of Mobile Card Services, a whitelabel solution that gives consumers control over payment cards. Headquartered in Silicon Valley, Ondot brings together an experienced management team from mobile, security, and payment card industries who share a vision of transforming how consumers interact with their financial institutions.

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

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