

Beyond The Card: Toward The Cardless And Contactless Future, a [PYMNTS](#) and [i2c Inc.](#) collaboration, is a research-based report examining shifting trends and technologies in the credit product space and offering case studies on key innovators.

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Introduction

Consumers around the world today can be found at restaurants and stores placing orders and paying simply by scanning QR codes with their smartphones without ever pulling out their wallets or receiving a bill from a server or clerk. Consumers have taken to the practice so naturally that it is easy to overlook the remarkable technological developments that have made such virtually touchless payment experiences possible, whether at home or at a business location.

The impetus for these developments is clear: Consumers and workers are keenly interested in minimizing the risk of exposure to COVID-19 through person-to-person contact or shared surfaces. The pandemic has prompted surges in online shopping and the use of contactless payment technologies, and it has fueled the popularity of recent shopping innovations, including curbside pickup, voice commerce and QR code-based ordering and purchasing. Consumers are effectively using their connected devices to become the point

of sale (POS), affording them the control and efficiency associated with online shopping wherever their transactions may take place.

The digital adaptations that have occurred over the past year would not have been possible without the technological foundation that developed over the past decade. Digital and cloud-based payment platforms have begun to earn the ubiquity of the physical infrastructure that has long supported electronic payments — plastic cards, wired terminals and core payment-processing systems.

Consumers are still using credit and debit cards for new and emerging transactions: 96 percent of them expect to use one of these as the underlying payment method for such novel connected transactions as augmented reality product apps.¹

Physical cards are changing form, as some NFC-capable mini-cards are being embedded in rings and other wearables. Others are becoming invisible, as cards are not only being issued “digital-first” – they are becoming “digital-only,” going straight from issuer to mobile wallet. This development is fitting, considering the degree to which commerce has shifted online since the pandemic. The share of total retail sales transacted online has surged since the start of this year, and this trend appears likely to hold in the months and years

ahead amid continued anxieties about in-store shopping.

These sociological and technological developments are creating vast opportunities for innovative FinTechs and banks. These organizations need to approach these opportunities strategically, however. Creating credit solutions involves both technical and regulatory complications, and it is vital that firms select high-quality partners. Beyond The Card: Toward The Cardless And Contactless Future, a collaboration with i2c Inc., aims to serve as a roadmap for this complex field. The report lays out the transformative potential of cardless and contactless technologies and features a series of case studies spotlighting how forward-thinking companies are realizing this potential.



¹How We Will Pay 2020. PYMNTS.com. 2020. <https://www.pymnts.com/study/visa-how-we-will-pay-2020-home-as-consumers-commerce-command-center/>. Accessed October 2020.

Executive Insight

What are the greatest challenges that keep card issuers — FIs, corporates or others — from offering innovative “cardless” and contactless products and services?

“The challenges keeping card issuers from offering innovative cardless and contactless products are the same barriers that stall and thwart payments’ progress in general, namely organizational and technical barriers tied to the scarcity of time and resources needed to advance digital-first initiatives using legacy technology. Thankfully, these daunting hurdles are being overcome with more flexible infrastructures that make it easier to actually put customer experience first.

Despite clear mandates, the reality is that when many of today’s issuers embark on contactless and cardless initiatives, they’re asked to make trade-offs they didn’t imagine. The reasons are well-known to insiders: [Issuers are] often choosing between less-than-optimal partners that resist or can’t

accommodate requirements that fall outside their established template.

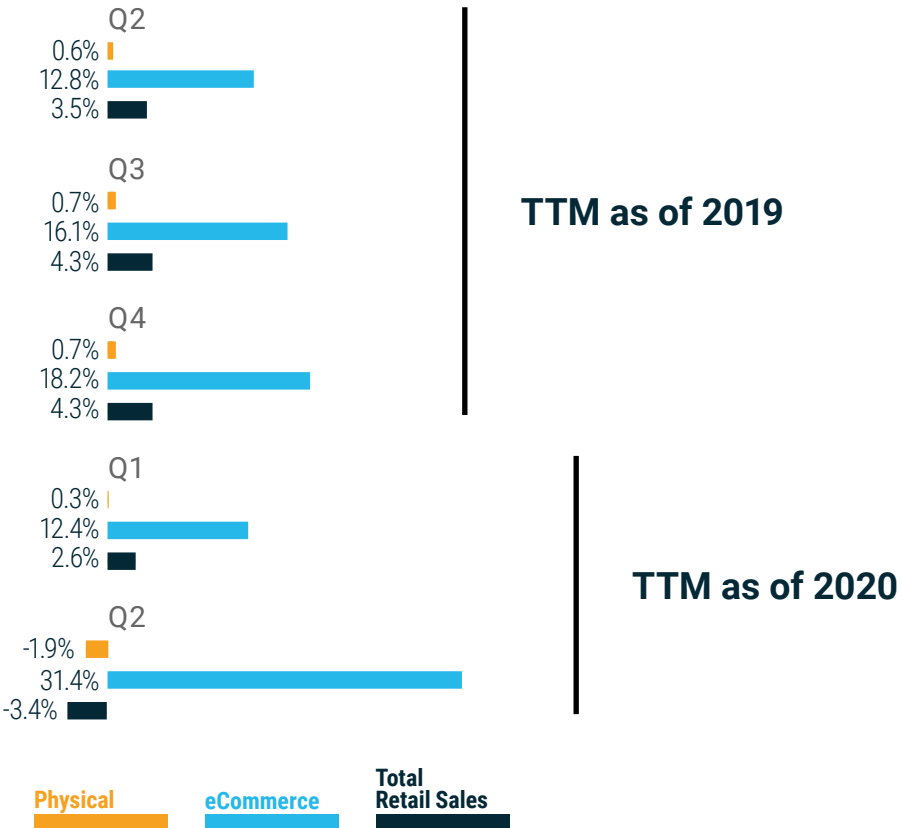
Contactless and cardless [features] are key components of a contemporary digital-first approach. At the product level, they’re part of a more considered value proposition that needs to be executed as seamlessly as possible and with the fullest observance of the owner’s vision and desired outcome. Executing these technologies or any innovation for that matter has to start with raising our expectations, starting with our next initiative. Speed to market, flexibility, scalability and reliability may be overused words, but they are also principles that can be specified, shopped and secured in today’s marketplace, as evidenced by unwavering innovators who are designing, deploying and evolving differentiated digital-first products.”

JIM McCARTHY
president of *i2c Inc.* 

The rise of cardless and contactless payments

The phrase “meteoric growth” is something of a cliché. It is apt when considering the rise of online payments during the pandemic, however. Year-over-year growth in eCommerce sales in the United States nearly tripled between Q1 2020 and Q2 2020.²

FIGURE 1
Annualized growth in trailing 12-month (TTM) physical and eCommerce retail sales



²Webster, K The Rise Of The Auto-Refill Economy. PYMNTS.com. 2020. <https://www.pymnts.com/subscription-commerce/2020/the-rise-of-the-auto-refill-economy/>. Accessed October 2020.

The size of the eCommerce slice in the overall retail market pie has doubled from 2019 and now makes up close to a quarter of all sales.³ This means there has been a monumental shift in payment volumes toward credit and debit cards, the primary means of online payments.

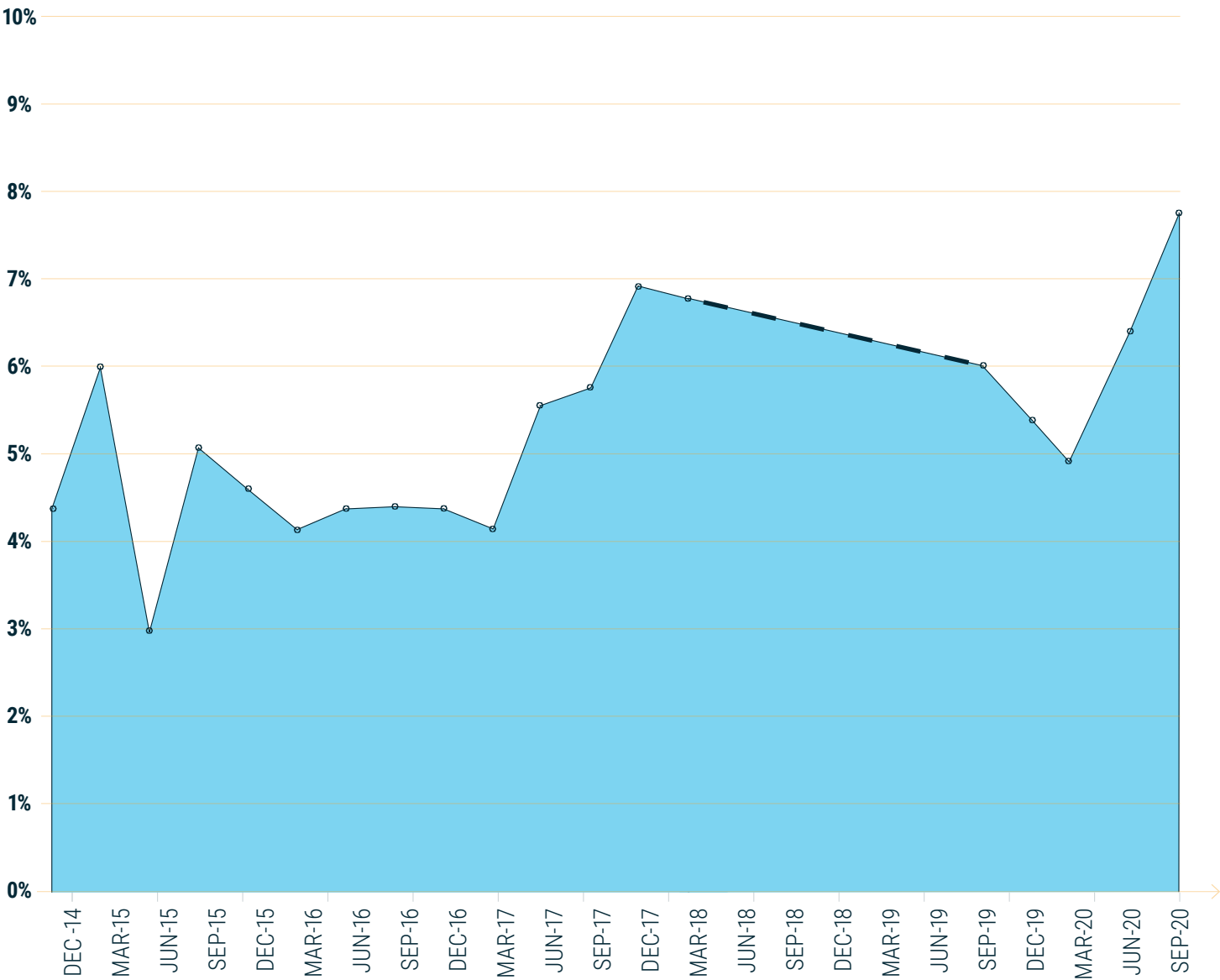
These dynamics are not confined to eCommerce, however. They extend to how consumers are paying in stores and via connected devices. Contactless transactions have grown by more than 40 percent globally since the onset of the pandemic, and the shift has been especially notable in the U.S., where chip-enabled contactless payments had seen slower uptake than in other parts of the world.⁴

More than three-quarters of U.S. consumers are now aware of contactless

payments, a 25 percent increase from a year ago. Large majorities of them are interested in using the payment technology in grocery stores and drug stores: 83 percent and 81 percent of consumers would use contactless payments at such locations, respectively, if possible. Underpinning these trends is an accelerated decline in the use of cash: 48 percent of consumers report carrying cash with them regularly, an 11 percent decline from 2018.⁵

These attitudes can be seen in the sudden reversal of some trends in U.S. mobile wallet payments over the past few years. Use of the Apple Pay mobile wallet in the U.S. has increased by 59 percent since March of this year, for example, sharply reversing a downward trend over the previous two years.⁶

FIGURE 2
Percentage of consumers in an eligible store and with an eligible device using a digital wallet to pay, with confidence intervals



SOURCE: Apple Pay At Six, PYMNTS.com

³ Mastercard SpendingPulse: Estimated \$53 Billion in Additional U.S. E-Commerce Sales as Pandemic Drives Consumers Online in April and May. Mastercard Content Exchange. 2020. <https://mastercardcontentexchange.com/newsroom/press-releases/2020/june/mastercard-spendingpulse-estimated-53-billion-in-additional-us-e-commerce-sales-as-pandemic-drives-consumers-online-in-april-and-may/>. Accessed October 2020.

⁴ White, A. More than half of Americans now use contactless payments, according to Mastercard poll. CNBC. 2020. <https://www.cnbc.com/select/mastercard-survey-contactless-payments/>. Accessed October 2020.

⁵ How We Will Pay 2020. PYMNTS.com. 2020. <https://www.pymnts.com/study/visa-how-we-will-pay-2020-home-as-consumers-commerce-command-center/>. Accessed October 2020.

⁶ Apple Pay At Six. PYMNTS.com. 2020. <https://www.pymnts.com/study/apple-pay-six-year-anniversary/>. Accessed October 2020.

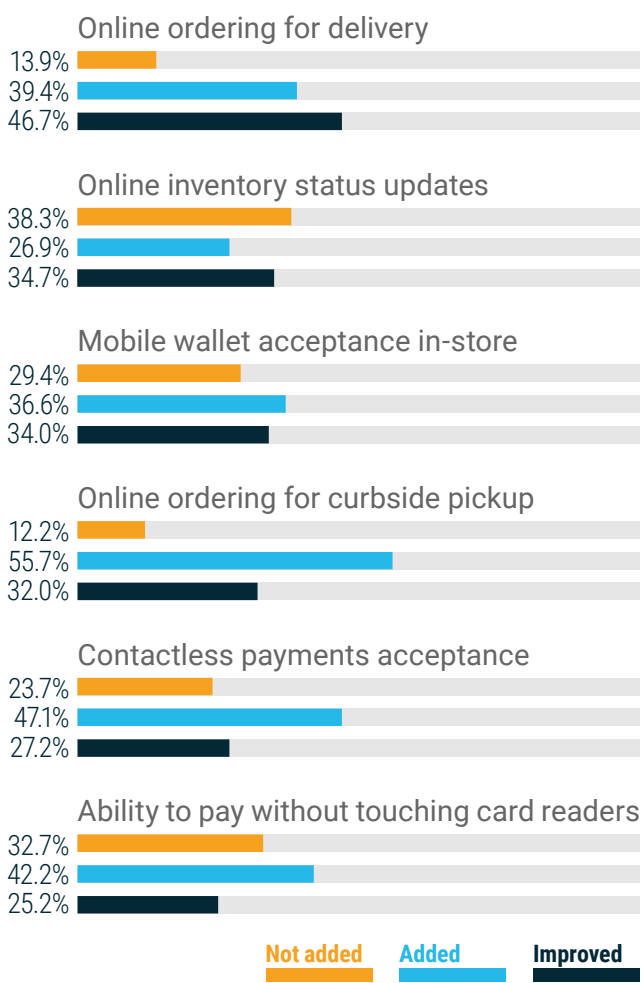
The health factor

Heightened concerns around COVID-19 transmission during the pandemic have been a main driver of contactless payment adoption. A large majority of contactless users — 82 percent — consider the technology cleaner than other means of payment. Speed is another key incentive, and consumers can minimize the time they spend at checkout with the method because contactless payments are faster than some other methods.⁷

These considerations inform consumers’ decisions as to where they shop. PYMNTS’ research shows that 40.2 percent of consumers cite attempting to avoid COVID-19 as the main reason they want to shop with merchants that offer digital features, and it finds that contactless payment capabilities are one of consumers’ priorities.⁸

FIGURE 3
Features consumers believe merchants have added or improved since the pandemic began

Share who say the merchants with which they shop have added or improved select features



SOURCE: PYMNTS.com | June 2020

These concerns are especially important to younger consumers. PYMNTS’ research shows that 60 percent of Generation Z consumers consider mobile wallet acceptance crucial when choosing merchants and that 58.4 percent of these same consumers feel the same way about contactless payments.⁹

The health concerns of the public are well grounded, given what researchers have discovered about the virus’s ability to remain airborne and on physical surfaces. This is part of the reason the European Union has officially encouraged the use of contactless payments.¹⁰

Merchants appear to be getting the message, including in the United States. Three-quarters of U.S. consumers say

the stores they shop at have recently added or increased contactless payments acceptance capabilities, and more than 70 percent of merchants have added or increased in-store digital wallet acceptance capabilities.¹¹

The pandemic has clearly driven a large share of consumers to cardless and contactless digital payments, and it has prompted merchants to enhance their payment acceptance capabilities. This raises the question of whether these shifts will continue should the pandemic ease or whether consumers will revert back to old habits such as paying with cash. Research suggests that these changes will be long-lasting.

⁷ Mastercard Study Shows Consumers Globally Make the Move to Contactless Payments for Everyday Purchases, Seeking Touch-Free Payment Experiences. Mastercard Content Exchange. 2020. <https://mastercardcontentexchange.com/newsroom/press-releases/2020/april/mastercard-study-shows-consumers-globally-make-the-move-to-contactless-payments-for-everyday-purchases-seeking-touch-free-payment-experiences/>. Accessed October 2020.

⁸ The Great Reopening. June 2020. PYMNTS.com. 2020. <https://securecdn.pymnts.com/wp-content/uploads/2020/06/The-Great-Reopening-Doubling-Down-On-Digital-edition.pdf>. Accessed October 2020.

⁹ Main Street on Lockdown, Business Recovery Study, May 2020. PYMNTS.com. 2020. <https://www.pymnts.com/coronavirus-data-center/>. Accessed October 2020.

¹⁰ EU Encourages Contactless Payments To Reduce Coronavirus Risk. PYMNTS.com. 2020. <https://www.pymnts.com/news/payment-methods/2020/eu-encourages-contactless-payments-coronavirus/>. Accessed October 2020.

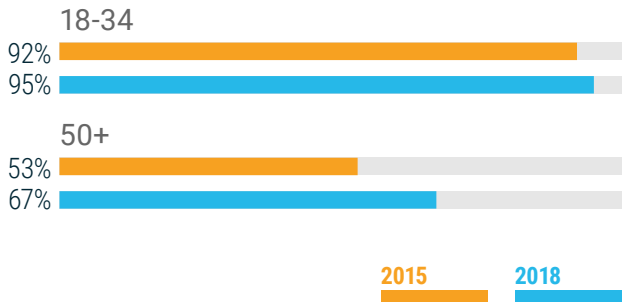
¹¹ The Great Reopening, Doubling Down on Lockdown, June 2020. PYMNTS.com. 2020. <https://securecdn.pymnts.com/wp-content/uploads/2020/06/The-Great-Reopening-Doubling-Down-On-Digital-edition.pdf>. Accessed October 2020.

Emerging payment trends' long-term impacts

Shopping journeys have shifted online since the pandemic began, and consumers are opting for contactless payment methods when they do go to physical stores. The rapid adoption spurred by the pandemic was only possible because of trends that were already well underway before COVID-19 appeared.

The first trend concerns smartphone ownership around the world. Three-quarters of the adult populations in developed economies have smartphones, whereas 45 percent possess them in emerging economies. Eighty-one percent of U.S. adults have smartphones on average, and 95 percent of those 18-34 years old do.¹² Smartphone ownership is approaching ubiquity for younger consumers in advanced economies: 96 percent of such individuals aged 18-29 own the devices.¹³ Smartphones have become

FIGURE 4
Percentage of adults who own a smartphone



SOURCE: Mobile Fact Sheet, Pew Research Center

the financial center for many consumers, allowing them to deposit a check in their bank account or pay a friend back for a meal.

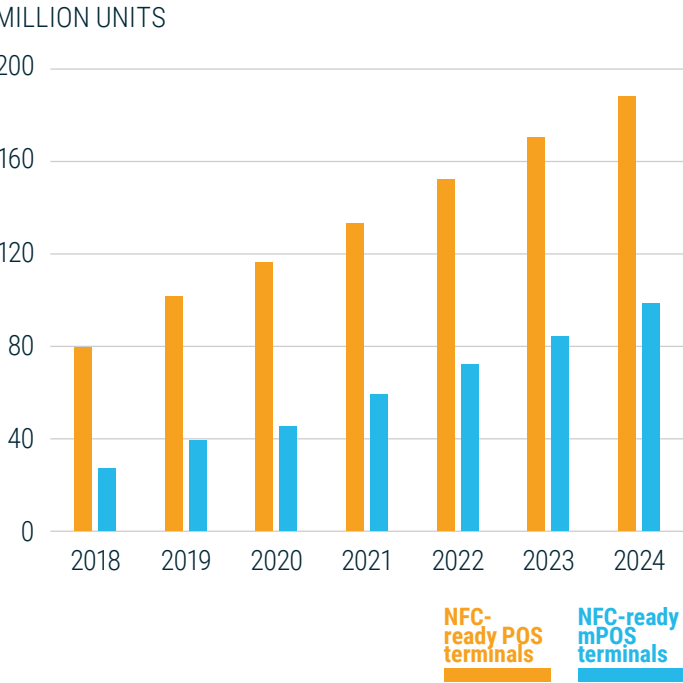
The other trend concerns technological capacity. The end-to-end infrastructure necessary to support ubiquitous contactless payments is coming into place after years of investment. More than 90 percent of iPhones in the U.S. now support the Apple Pay mobile wallet, and a growing share of POS terminals are

¹² Silver, L. Smartphone Ownership Is Growing Rapidly Around the World, but Not Always Equally. Pew Research Center. 2019. <https://www.pewresearch.org/global/2019/02/05/smartphone-ownership-is-growing-rapidly-around-the-world-but-not-always-equally/>. Accessed October 2020.

¹³ Mobile Fact Sheet. Pew Research Center. 2019. <https://www.pewresearch.org/internet/fact-sheet/mobile/>

¹⁴ PYMNTS Mobile Wallet Adoption <https://securecdn.pymnts.com/wp-content/uploads/2020/04/Mobile-Wallet-Adoption-2020-April.pdf>. Accessed October 2020.

FIGURE 5
Installed base of NFC-ready POS and mPOS terminals (World 2018-2024)



SOURCE: Berg Insight releases contactless POS terminal market stats, NFCW.com

capable of accepting NFC payments.¹⁴ A recent report estimated that 88 per-cent of POS terminals worldwide will be NFC-capable by 2024.¹⁵

The strongest evidence that the shift toward contactless and cardless pay-ments will endure can be found in consumers’ attitudes. More than 75 per-cent of consumers who have shifted from brick-and-mortar to online shop-ping will maintain these shifts beyond the pandemic.¹⁶ The trendlines for con-tactless methods are even stronger: Nearly three-quarters of consumers plan to continue using them even after the pandemic subsides¹⁷, and 57 per-cent say the same specifically about mobile wallets.¹⁸



¹⁵ Clark, S. Berg Insight releases contactless POS terminal market stats. NFCW.com. 2020. <https://www.nfcw.com/2020/05/06/366436/berg-insight-releases-contactless-pos-terminal-market-stats/#:~:text=The%20global%20installed%20base%20of,ready%20in%202024%2C%20Berg%20says>. Accessed October 2020.

¹⁶ The Great Reopening, Doubling Down on Lockdown, June 2020. PYMNTS.com. 2020. <https://securecdn.pymnts.com/wp-content/uploads/2020/06/The-Great-Reopening-Doubling-Down-On-Digital-edition.pdf>. Accessed October 2020.

¹⁷ Mastercard Study Shows Consumers Globally Make the Move to Contactless Payments for Everyday Purchases, Seeking Touch-Free Payment Experiences. Business Wire. 2020. <https://www.businesswire.com/news/home/20200429005592/en/Mastercard-Study-Shows-Consumers-Globally-Move-Contactless>. Accessed October 2020.

¹⁸ Preparing Merchants For The Coming Mobile Wallet Boost. PYMNTS.com. 2020. <https://www.pymnts.com/digital-payments/2020/preparing-merchants-for-the-coming-mobile-wallet-boost/>



MAJID AL FUTTAIM FINANCE

How MAF Finance helped shoppers in the Middle East after the malls closed

Case Studies

Many shopping malls in North America have fallen on hard times since their heyday in the 1980s. This is not the case in the United Arab Emirates, where malls remain very popular. One even boasts an indoor ski slope, and it was developed by Majid Al Futtaim (MAF) Finance, a large real estate company in the UAE that has more than two dozen malls in its portfolio in the Emirates and elsewhere in the region.¹⁹

The company branched into consumer financial services in 2008, a move that dovetailed with the relationship it

already had with hundreds of brands and merchants at its malls. MAF began to issue store-branded credit and prepaid debit cards with a special focus on reward and loyalty programs.

The pandemic has put the wisdom of this move in a new light. The UAE's many malls were forced to close in the early days of the outbreak, yet the pandemic did not entirely dampen consumers' appetites for shopping. They just took their shopping online — and many consumers in the region used MAF-issued cards to make their purchases.

¹⁹ Ski Dubai. Mall of the Emirates. 2020. <https://www.malloftheemirates.com/entertainment/ski-dubai>. Accessed October 2020.

Rasool Hujair, the CEO of MAF Finance, has observed these shifts since the onset of the pandemic. “The drop in spending is a lot — about 40 percent — but the increase in digital payments is about 55 percent, which is massive,” he told PYMNTS in a recent interview.

Hujair explained that digital innovation has long been a priority for the company, and such initiatives have included contactless cards, mobile wallet integration and data analytics that allow merchants to optimize their reward programs. The pandemic has revealed the value of these investments in core, unexpected ways for many companies that were early adopters of digital technologies.

“These ideas have been there for a number of years, and companies like us experimented in adopting them. But the customer was not ready,” Hujair said. “Today, suddenly there has been a significant increase in the willingness of customers to try them — and obviously

they like them, and they are continuing to use [them].”

MAF offers credit and prepaid debit cards. The latter are not unusual in the UAE, as citizens are required to have a minimum amount of cash holdings to be eligible for credit cards.

The data visibility embedded in MAF’s card products helps merchants and brands stay connected with their customers and engage new ones — a vital benefit at a time when foot traffic is diminished and likely to remain so for an extended period of time.

“It’s important to enhance the customer experience and to collaborate with merchants to provide the best customer experience possible. This means being able to understand the customer and able to customize our services to suit those individual customers,” Hujair said. “We also invest a lot in advanced analytics to understand the customer better, and this helps our ability to

segment our customers into the smaller groups ... to better understand and predict what they want.”

Businesses in the UAE have steadily reopened since the early days of the pandemic. This means consumers are returning to the malls — and having a newfound appreciation for the contactless capabilities that are integral to MAF’s cards. Contactless chips allow shoppers to pay quickly and avoid contact with shared surfaces. Hujair said the share of contactless payments has nearly tripled to about 35 percent of total transactions.

Other payments innovations are also being adopted there — restaurants are using QR codes to allow diners to order and pay from their own smartphones, for example.

Hujair noted that MAF leaves the many technical aspects of card authorization and security to its processing partner, i2c. This allows the company to focus



on what it views as its core mission: customer experience.

“We view customer experience as something that we should own. Therefore, we need to have a front end that allows us to deliver the level of customer experience we wish for our customers, [one] that is customized and that uses data to understand them to provide offers and experiences relevant to their lifestyles.”

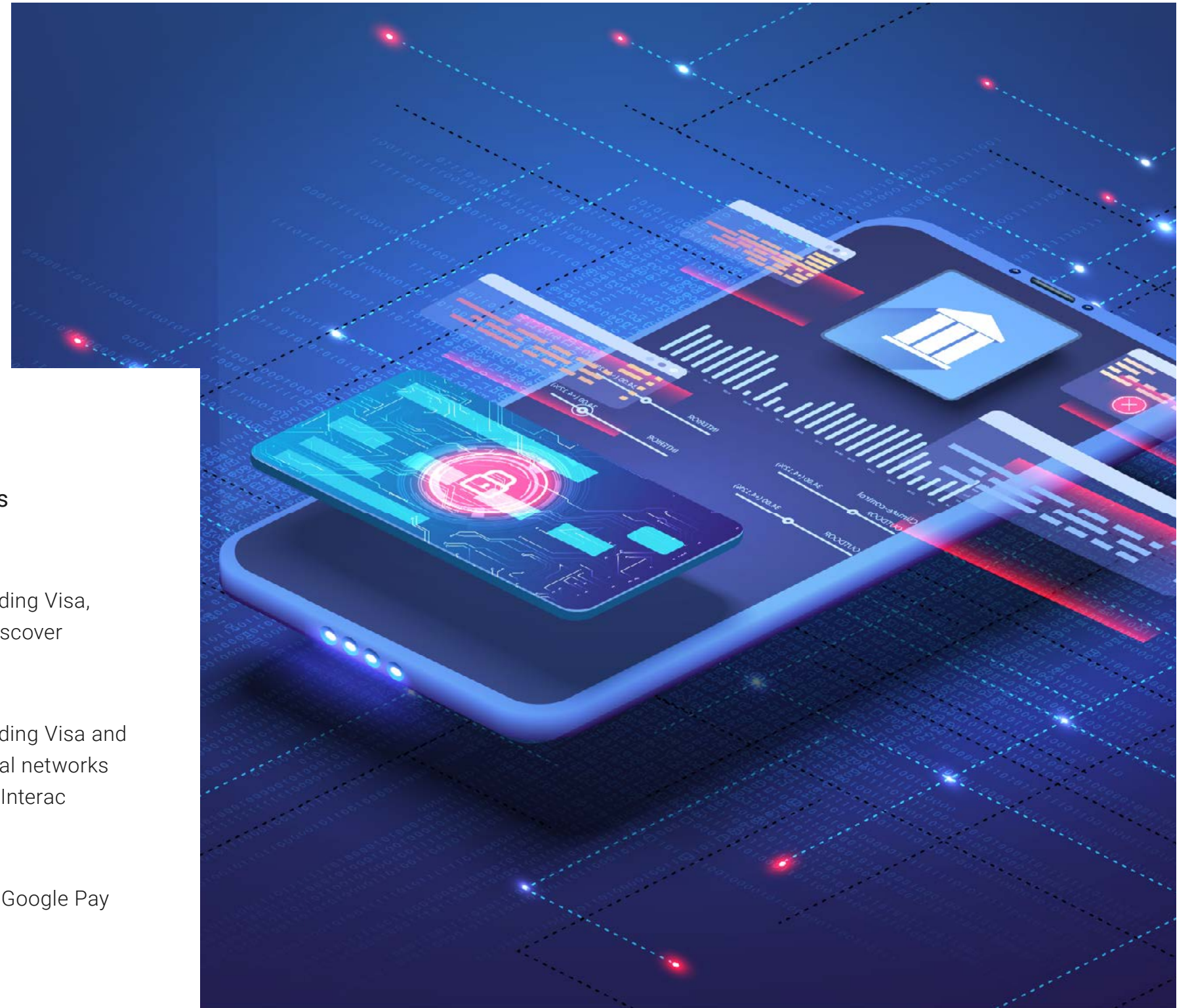
Going virtual

The rise of cardless and contactless payments means that the underlying credit and debit cards that make them possible are literally becoming more and more invisible. Physical cards are becoming virtual, and this shift is having profound implications for card issuers and innovators.

Virtual cards can be issued instantly and securely provisioned to a mobile device or computer. This allows issuers to leapfrog the lengthy process of reviewing card applications and sending out plastic cards — advantages that loom especially large during a pandemic.

Types of virtual cards

- Reloadable virtual cards
- Virtual credit cards:
Carried by networks including Visa, Mastercard, Union Pay, Discover
- Virtual debit cards:
Carried by networks including Visa and Mastercard as well as local networks like NYCE, STAR, PROSA, Interac
- Mobile wallets:
Samsung Pay, Apple Pay, Google Pay



Virtual cards are less costly to distribute and maintain because they are less likely to be lost or stolen. They also allow issuers and acquirers to start realizing revenue from the moment an applicant is approved. This naturally benefits merchants and consumers by increasing the likelihood customers will have access to financing tools the moment the need arises.

Firms can issue virtual cards to employees or contractors for set expenses and purposes, and they can also securely employ one-time transaction codes instead of card numbers. Virtual cards help issuers and financial service providers reach new and emerging markets as well. Prepaid cards can be issued to consumers who otherwise might have difficulty obtaining credit, and novel credit scoring models can be employed to issue virtual cards to those who lack conventional credit histories. Virtual cards also offer a path for smaller

banks, digital banks and FinTechs to be nimbler in a credit card space dominated by large financial institutions.

How virtual cards work

- Request
The customer applies for a credit card
- Issuance
A credit processing platform approves the application based on predefined underwriting parameters and algorithms, assigns a credit limit and issues the virtual card
- Delivery
The virtual card is pushed to the consumer via email or SMS with a link and a code to activate it
- Validation
The processing platform validates the code and displays credit card details to the customer
- Use
The customer enters the credit card details at the point of sale to complete the purchase

Wearables

The virtualization of payment cards and contactless technologies have come together to fundamentally alter the form factor of the traditional plastic card. The same compact NFC chips that make contactless payments possible can be embedded in other materials, including wearable fabrics and plastic bands. Transactions with wearables can be completed simply by passing one’s wrist over a payment terminal or an IoT-equipped device, eliminating the need not only for a physical card but also for a wallet. Wearable technologies are being employed in fitness applications and “closed-loop” systems in resorts, transit stations and entertainment venues. Disney has issued more than 11 million MagicBands that allow patrons to pay for rides while reducing time waiting in line, for example.²⁰



Examples of next-gen wearables

- Apple Watch
- NFC rings
- Disney MagicBands
- Clip-on NFCs
- Printed QR codes

²⁰ Tode, C. Wearables to account for 20pc of mobile proximity payments by 2020: report. Retail Dive. 2017. <https://www.retaildive.com/ex/mobile-commercedaily/wearables-payments-to-reach-501b-by-2020-report>. Accessed October 2020.

zero | ZERO

How Zero's digital-first strategy is blurring the lines between credit and debit cards

Consumers who have come of age in the internet era approach banking and spending from vastly different perspectives than preceding generations. Many millennials and members of Gen Z lead their financial lives through their smartphones, accessing their bank accounts via apps or paying friends with Venmo. The traditional boundaries between bank accounts, credit cards and debit cards are less relevant for many of them than being able to manage their spending in a convenient and holistic way.

FinTech Zero is among a new generation of card issuers catering to these changing attitudes and targeting more than just the millennial demographic.

Two years ago the company introduced its flagship product, a credit card with generous cash-back incentives that can also function essentially as a debit card, allowing users to pay bills automatically, for example. Customers can start using their cards the moment they are approved — they are issued virtual cards and receive a physical card only if they request one.

“A lot of people these days are looking to primarily manage their finances from their cell phone, so that’s pretty much the front end of our offering,” said Robert Rodden, Zero’s executive vice president for credit. “If you want to access your account, if you want to

perform a transfer, you would go into the app and make that happen. So it’s really an app-forward experience that we’re offering.”

Zero has recently begun offering a product line that further blurs the lines between credit and debit. The debit card functions much like a credit card — it links to a deposit account but offers the rewards and cash back of a credit card. The common thread between the two card offerings is a sleek mobile app.

“We’ve tried to make [the app] rather simple in terms of the interface, so you see your balance at the top and you see transactions underneath,” Rodden said.

The debit card also matches the company’s larger digital-first approach, Rodden added.

“As soon as you initiate your first deposit, you’ll get access to the virtual

account number, so it’s pretty much immediate,” he said.

The pandemic has profoundly shaken up the banking and credit landscape, and it has had severe economic impacts on consumers’ finances, especially those who have lost jobs. It has made consumers much more — if not completely — reliant on digital platforms for shopping and accessing banking services. Rodden has observed both of these impacts firsthand.

“We’ve certainly seen the effects of the virus situation, both on our customers and [on] our business in general,” he said. “We’ve seen customers having challenges maintaining their banking balances and things like that.”

Zero has also worked to expand its cards’ contactless payment capabilities in response to customer demand.

“Our customers were definitely calling in and asking us to get it implemented, given the situation,” Rodden said.

The pandemic has highlighted the value of digital-first credit and banking, especially at its onset, when many physical bank branches closed or greatly limited their availability. Consumers who may have had little experience being paid with paper checks suddenly needed accounts where they could deposit government stimulus or assistance payments.

“If they didn’t have a bank account previously, they really need a banking product now,” Rodden said. “They need solutions that prevent them from having to go physically into a bank to deposit a check, for instance. They can receive [funds] digitally and not have to have that ongoing contact.”

A FinTech like Zero needs to be able to move fast and quickly adapt to changing economic circumstances, and the company has many partners toward this end, including a payment processing platform.

“[The platform] has basically enabled us to take on a lot of responsibility and a lot of customization with the fact that

they are willing to be flexible in the payments,” Rodden said, referring to its payments processor, i2c. “i2c has a good set of APIs that we’ve integrated with that allow us to do things really quickly,” he added.

Speed can make all the difference for ambitious FinTechs in a challenging economic environment.



“If they didn’t have a bank account previously, they really need a banking product now. They need solutions that prevent them from having to go physically into a bank to deposit a check, for instance. They can receive [funds] digitally and not have to have that ongoing contact.”



How Purewrist leverages wearable technology to make payments safer and faster in the pandemic era

A global pandemic might normally seem like an inopportune time to bring a new product to market — unless your product is a contactless payment wristband. Purewrist enables users to make payments simply by tapping a lightweight wristband at any NFC-enabled terminal.

The product takes the concept of the wearable payment wristband beyond “closed-loop” use cases such as amusement parks and stadiums to the wider world, allowing for payments that are contactless and hands-free. Users do

not have to pull out their wallets, cards or smartphones, where all can be magnets for germs.

“When you start doing contactless payments, you realize you don’t really want to take a phone out of your pocket,” said Suresh Palliparambil, the CEO and co-founder of Purewrist. “I think the current situation is an accelerator for that.”

Purewrist launched in the U.S. market in September. The concept is straightforward: Customers purchase silicone wristbands containing a removable



NFC-enabled mini-card. The bracelets are waterproof and washable, and they come in a variety of colors. Consumers can purchase them with set amounts between \$10 and \$50 preloaded, and they can then link a debit or credit card to reload the card automatically. A companion mobile app can manage and control the account.

Launching a contactless payment bracelet in the U.S. might have seemed risky before the pandemic, as the use of mobile wallets and other contactless forms of payment, including cards and smartwatches, had lagged in the U.S. compared to parts of Europe and Asia. The pandemic has changed this: U.S. merchants have reported a nearly 70 percent increase in the use of contactless payments since the start of the year.²¹ Upgrading POS terminals to

accept contactless payments has also emerged as a top priority for merchants.

Palliparambil has heard these attitudinal developments directly from merchants.

“From all the conversations that we have had in the past three months, there’s not a single business that is not considering or is [not] in the process of upgrading their terminals to accept contactless payments. ... So that hurdle is going away,” he said.

Palliparambil can tick off a long list of current and prospective use cases for the bracelet, starting with family finances. The bracelet can be a safe and controlled way to provide children with spending money — or give teenagers their own spending money as an easy onramp to managing their own card accounts.

“I can give a bracelet to my 16-year-old, and she can go on spending money, and if it is set up to automatically reload, I know exactly where she is spending her money,” he said. “I don’t need to keep paying these people in cars [for ride-hailing services]. So this allows me to get visibility about the transactions.”

Purewrist has ambitions that extend beyond the U.S. consumer market. The company views itself as a global wearables platform that could be employed by numerous organizations that might be interested in distributing unique spending and benefit tools to their employees, including transit agencies, resorts and businesses.

The startup has several key partners, including its payments processor, i2c Inc. Palliparambil explained that having others handle the intricacies of card issuance allows the company to focus on its core mission and future plans.

“You have somebody else handle the issuing,” he said. “We want to actually do some data analytics on consumer behaviors to discover trends of what’s happening right now and how people are using their cards.”

Step one to gaining these early insights for Purewrist was launching its timely wearable into the real world.

“When you start doing contactless payments, you realize you don’t really want to take a phone out of your pocket.”

²¹ Coronavirus leads to more use of contactless credit cards and mobile payments despite cost and security concerns. National Retail Federation. 2020. <https://nrf.com/media-center/press-releases/coronavirus-leads-more-use-contactless-credit-cards-and-mobile-payments>. Accessed October 2020.

Bringing cardless and contactless innovations to market

The changing dynamics of the consumer finance space have created vast opportunities for FIs, FinTechs and innovators from outside the conventional financial sphere. This has intensified competition, and the largest technology

companies in the world, including Apple and Google, are branching into credit and financial services. These realities underscore the importance of agility, collaboration and speed to market.

Bringing new financial offerings to market is complicated and involves layers of regulatory and technical complexity. Even conventional FIs struggle with this process, not least because they must often rely on antiquated and inflexible core processing systems. This is why partnership has become a guiding principle in the financial ecosystem, even for incumbent banks. A recent PYMNTS' study found that the acquirers and other merchant service providers (MSPs) that had the most ambitious innovation

agendas planned to improve their processing capabilities by partnering with third parties.²²

Platforms-based payment processors do a lot more than simply process payments — they can provide plug-in capabilities tailored to the nature of a provider's product offering or the market need they are seeking to address. These might include everything from cross-border payments to instant card issuance and data analytics. One recent report noted that card implementation processes can be "greatly enhanced, and costs [can be] reduced by partnering with a tech provider."²³

It is especially important for solution providers to choose their partners wisely in a crowded market, however. They should think through several key considerations.

The payment platform checklist:

- ✓ **Flexibility:**
Does the partner offer services on a modular basis that can be adapted to a particular solution?
- ✓ **Scalability:**
Does the partner have the resources to support rapid growth?
- ✓ **Global Reach:**
Is the partner able to work with multiple banking and regulatory systems across borders?
- ✓ **Security:**
Does the partner employ sophisticated artificial intelligence (AI) and machine-learning technologies to protect against existing and emerging fraud threats?
- ✓ **Reliability:**
Does the partner offer a platform that works consistently around the clock without the risks of downtime and system failures?



²² The Key to Optimizing Merchant Services. PYMNTS.com. 2020. <https://www.pymnts.com/study/the-key-to-optimizing-merchant-services-playbook-january-2020/>. Accessed October 2020.

²³ Deloitte contactless payments technology: catching the new wave. Deloitte. <https://www.oxfordeconomics.com/publication/open/239264>. Accessed October 2020.



Wirex on the importance of partnership in building a card and app that can use cryptocurrency — and 150 other currencies

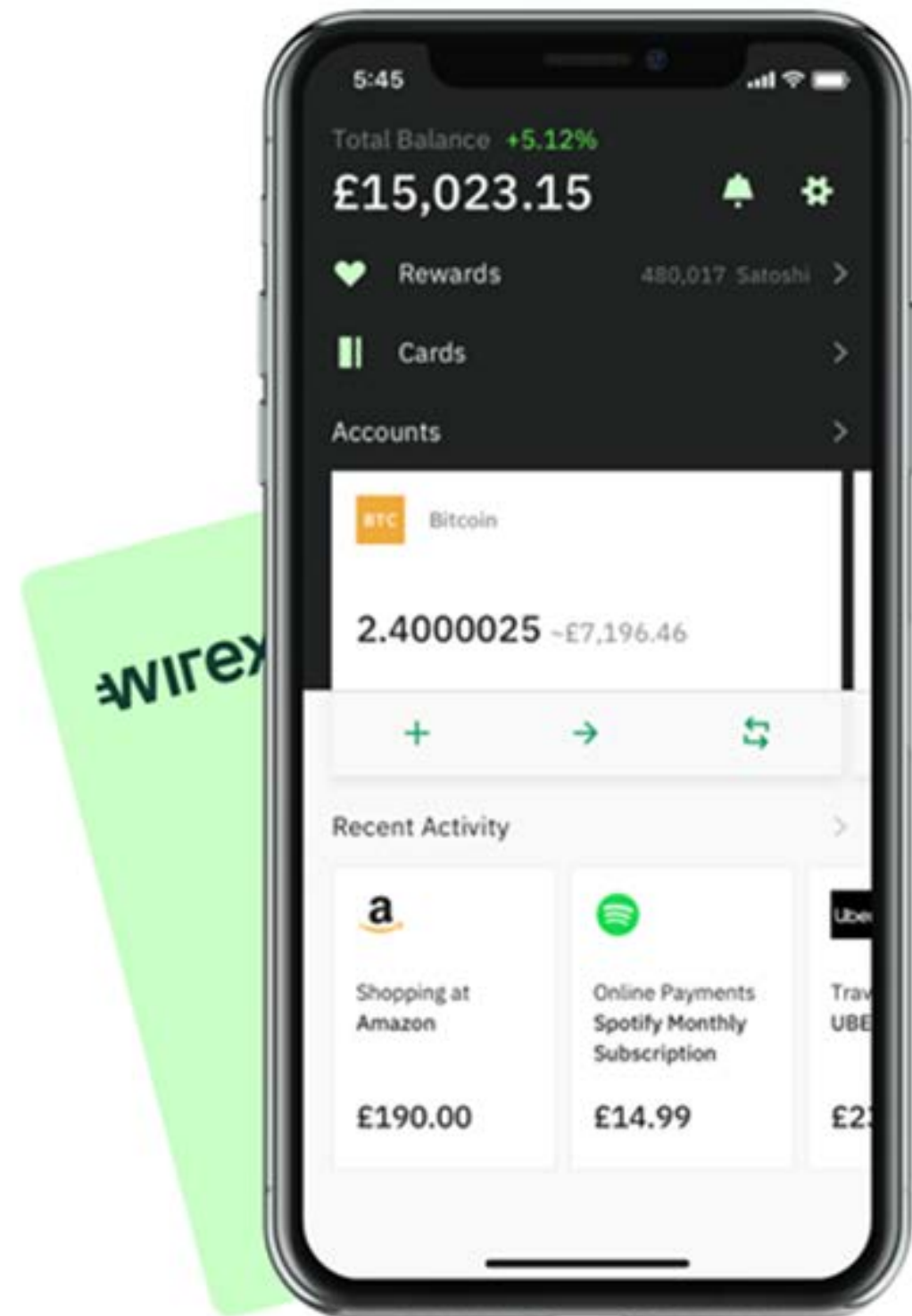
Cryptocurrencies no longer have the shadowy reputation they had in their early days. There may be no greater sign of their growing legitimacy than the fact that the two major card networks are now working with FinTechs to support a range of use cases involving the most prominent cryptocurrency, bitcoin.

FinTech Wirex is seeking to take the growing acceptance of cryptocurrency to another level by offering a debit card and companion app that can be used to make payments and trade in more than

150 currencies, including bitcoin and other cryptocurrencies.

The London-based company recently received a principal license with Mastercard, allowing the card to be used on its global network.

“There are a lot of companies with a Mastercard principal license, but we are the world’s first crypto-native company [to have one],” Pavel Matveev, the CEO of Wirex, told PYMNTS in a recent interview.



Neither Mastercard nor Visa, which Wirex also works with, actually processes transactions in cryptocurrencies — they are converted to traditional currencies before being transmitted over the networks. Wirex's value proposition is that it handles the back-end complexities of foreign exchange (FX) conversion and trading while offering users an app with a simple interface. It offers another standard but compelling card feature: 1.5 percent cash back.

Matveev said "crypto-enthusiasts" in Europe made up a large share of the initial market for the card, and this remains the case. But interest has expanded to include frequent travelers and investors — and the pandemic has further exposed the value of Wirex's unique set of services. The company observed a sharp drop-off in POS transactions when the pandemic hit but also witnessed a surge in cryptocurrency trading.

"We saw around a 40 percent decline in POS volume," Matveev said. "At the same time, we saw a big spike in terms of cryptocurrency transactions. Month on month, we saw 100 percent growth starting from March in terms of the volume."

Matveev attributed this to stock markets and banks being unattractive to investors since the outbreak.

"Customers were more interested in alternative investments or saving options because obviously savings accounts in Europe were not really an option anymore — banks were offering a negative interest rate," he said.

It may go without saying that running a debit card and trading platform capable of working seamlessly with 150 fiat and crypto-based currencies is a complicated endeavor. This is why Wirex relies to a large extent on third-party partners to handle the technical aspects of payment processing and compliance.

"The value of having that handled by an outside partner is that [partnership gives us] the quickest time to market," Matveev said.

This also allows Wirex to remain a lean technology-focused company, even as it expands to North America and other new markets.

"We don't really want to have too much physical presence or to have 100,000 people in customer support or in operations," Matveev said. "So when we are talking about moving into a market like [the U.S.] or Canada, it's much easier for us to start with outsourcing. We always try to work with the services we already work with in other regions so then it's just an easy plug-and-play exercise where we are just copy-pasting what we have in Europe."

Scalability and operating cross-border are not merely value-added services for a FinTech like Wirex — they are central to the success of its business model.

This is why it is important for FinTechs to have partners like i2c that offer solutions that are adaptable, scalable and that can keep pace with their ambitions for growth.

"Customers were more interested in alternative investments or [alternative] saving options because obviously savings accounts in Europe were not really an option anymore — banks were offering a negative interest rate."

Conclusion

The pandemic has proven to be one of the most wide-reaching events in recent history, both in terms of health and economic impact. This has also been a year of remarkable adaptation and resilience, however. Contactless and cardless payments are playing an integral role in this ongoing evolution by allowing consumers to make touchless digital payments online and in-store and encouraging expanded access to new types of credit solutions when and where they need them.

The pandemic has supercharged trends that were already well underway: the increased use of eCommerce, mobile wallets, virtual cards and wearables. What is fundamentally unique about

the present reality is that the promise of contactless card-based payments goes well beyond convenience. These are often the only ways to pay online and are also viewed as safer and more secure when shopping in the real world.

These developments have created unprecedented opportunities for FIs, FinTechs and other enterprises that want to bring new credit services to market. Doing so quickly and effectively in the current economic climate requires partnership, however. A payment processing platform that offers robust and flexible services can be the key to capturing new niches — and growing popularity — in a rapidly shifting global economy.

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.



i2c is a global provider of highly configurable payment and banking solutions. Using i2c’s proprietary “building block” technology, clients can easily create and manage a comprehensive set of solutions for credit, debit, prepaid, lending and more, quickly and cost-effectively. i2c delivers unparalleled flexibility, agility, security and reliability from a single global SaaS platform. Founded in 2001 and headquartered in Silicon Valley, i2c’s next-generation technology supports millions of users in more than 200 countries/territories and across all time zones. For more information, visit www.i2cinc.com and follow us @i2cinc.

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