

DIGITAL[®] TRANSACTIONS

Trends in the Electronic Exchange of Value

THE E-COMMERCE BOOM

These days, everyone is buying online. How can processors make it simpler, faster, and more secure?



Volume Seventeen, Number Twelve • DigitalTransactions.net • December 2020

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the gimlet eye

THE NETWORK OF NETWORKS

HAVE YOU NOTICED LATELY that the so-called card networks are talking less and less about cards? This seems especially true of what we used to call the two big bank card networks, Visa and Mastercard. They ceased formally being “bank” card networks when they went public a decade ago, and now the “card” descriptor seems to be fading as the networks eye new opportunities in money movement with or without a plastic token.

Last month, we asked the two big networks about this. Here’s how Ansar Ansari, senior vice president of digital solutions and platform products at Visa, describes the overriding strategy at his company: “The focus of our business ... remains our network of networks, which is about moving money from all endpoints to all form factors. This network of networks allows us to provide end-to-end money movement solutions with best-in-class capabilities, using all available networks to optimize speed, security and price of a transaction for consumers, businesses, and governments around the world.”

Mastercard’s Ron Schultz, executive vice president for new payment flows, didn’t speak of a “network of networks” but Mastercard’s expression, “multirail,” is an intriguing descriptor for where that company is going strategically. With its acquisitions over the past few years along with internally developed technology, Shultz said Mastercard can support card, automated clearing house, and real-time transfers (through Vocalink), not to mention bill payments.

Both companies have bulked up through acquisitions in increasingly crucial markets like cross-border payments (Visa-Earthport, Mastercard-Transfast). Plus Mastercard a few months ago added account-to-account transfers through its acquisition of that part of the Nets business.

On top of that, both companies have made bids for data networks that connect fintechs like Square and Venmo with customers’ bank accounts for such functions as account verification and money movement. Mastercard will likely close soon on its \$825-million deal for Fincity Inc. (if it hasn’t already done so by the time you read this) while Visa’s \$5.3-billion proposal to buy Plaid Inc. has been stymied by the Justice Department on antitrust grounds.

The DoJ’s theory is that Visa fears Plaid, if left to its own devices, could ultimately challenge Visa’s dominant position in debit networking, so it bought the company to forestall that potential threat. Visa denies the allegation, and we’ll all have to wait to see how the case sorts out. But the interesting facet to the case is how even the U.S. government sees the potential for account debiting and crediting via direct connections rather than plastic tokens.

Whether the approach is multirail or network-of-networks, Mastercard and Visa clearly aren’t the card networks they once were. What they’re becoming is something far more interesting.

John Stewart, Editor | john@digitaltransactions.net

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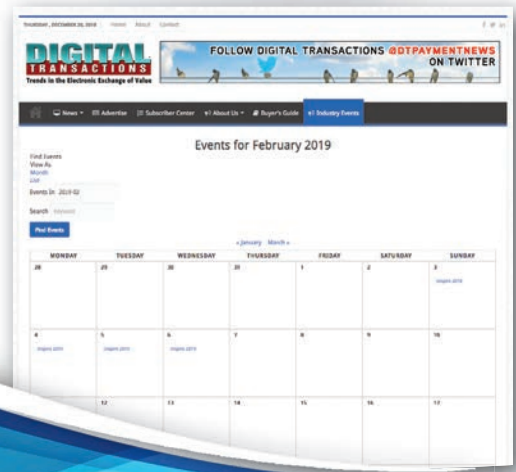
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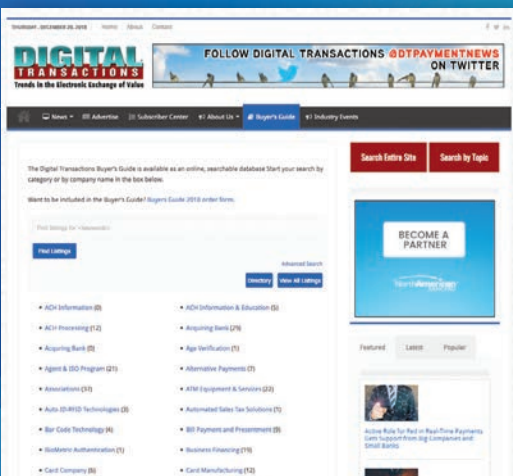


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VISA HITS BACK

Visa Inc. isn't taking it lying down. The card network last month delivered a rebuke to the Department of Justice over the government's anti-trust lawsuit attempting to block Visa's \$5.3-billion acquisition of Plaid Inc., calling the lawsuit "legally flawed and contradicted by the facts."

The Department of Justice, which had filed the suit hours earlier, charges that Visa's deal for Plaid is an effort to stifle competition in debit networking by acquiring an entity whose technology could enable it to challenge what the DoJ sees as Visa's dominance in that market.

"American consumers and business owners increasingly buy and sell goods and services online, and Visa—a monopolist in online debit services—has extracted billions of dollars from those transactions," assistant attorney general Makan Delrahim of the Justice Department's Antitrust Division says in a prepared statement.

"Now, Visa is attempting to acquire Plaid, a nascent competitor developing a disruptive, lower-cost option for online debit payments," the statement continues. "If allowed to proceed, the acquisition would deprive American merchants and consumers

of this innovative alternative to Visa and increase entry barriers for future innovators."

Visa announced in January it had struck a deal to acquire Plaid, an 8-year-old company that connects nonbank payments providers such as Stripe and Venmo with consumers' bank accounts. The links, which are opened with consumers' permission, are used to aggregate spending data, look up balances, and verify other personal financial information.

These connections, also known as open banking, are vital links for fintechs seeking to enable such services as peer-to-peer payments, online banking, and digital investing ("Open Banking And Its Friends," September).

One of the biggest players in open banking, Plaid has connections to 200 million consumer bank accounts and 11,000 U.S. banks, according to the DoJ.

In its response to the lawsuit, Visa argues the government misunderstands both Plaid's business and the ultra-competitive landscape in which it operates.

"The combination of Visa and Plaid will deliver substantial benefits for consumers seeking access to a broader range of financial-related services, and Visa intends to defend the transaction vigorously," Visa says in its statement.

"As we explained to the DoJ, Plaid is not a payments company. Visa's business faces intense competition from

Visa is a
'monopolist in
online debit
services.'

—**MAKAN DELRAHIM**, ASSISTANT ATTORNEY GENERAL OF THE JUSTICE DEPARTMENT'S ANTITRUST DIVISION



a variety of players—but Plaid is not one of them,” the statement goes on. “Plaid is a data network that enables individuals to connect their financial accounts to the apps and services they use to manage their financial lives, and its capabilities complement Visa’s.” good for competition.”

Far from being anticompetitive, the merger will be “good for competition,” Visa argues. The company could not be reached for further comment.

Despite Visa’s claims, Plaid’s size and reach are most likely what gave rise to the DoJ’s theory that an acquisition by Visa would violate antitrust law, says Patricia Hewitt, principal at PG Research & Advisory Services, a Savannah, Ga.-based consultancy.

“There is increasing value in organizations to get to depository accounts and affect transactions in those accounts,” Hewitt says. “What Plaid does is connect disparate

entities to bank accounts and other authentication services. The acquisition of Plaid by Visa could lock out a lot of competition in open banking.”

“Visa has always been an aggressive competitor and it looks for contractual exclusivity in its business arrangements,” she adds. “The DoJ is obviously looking hard at the antitrust implications of Visa’s planned acquisition of Plaid.”

—Peter Lucas

PAYPAL’S ‘FUNDAMENTAL OVERHAUL’

PayPal Holdings Inc.’s top executives last month laid out what chief executive Dan Schulman called “a fundamental overhaul” of the company’s PayPal and Venmo apps that will include a new cryptocurrency feature. Also on the docket are bill-payment and QR code capability on top of near-field communication technology and PayPal’s Pay in 4 installment-lending option.

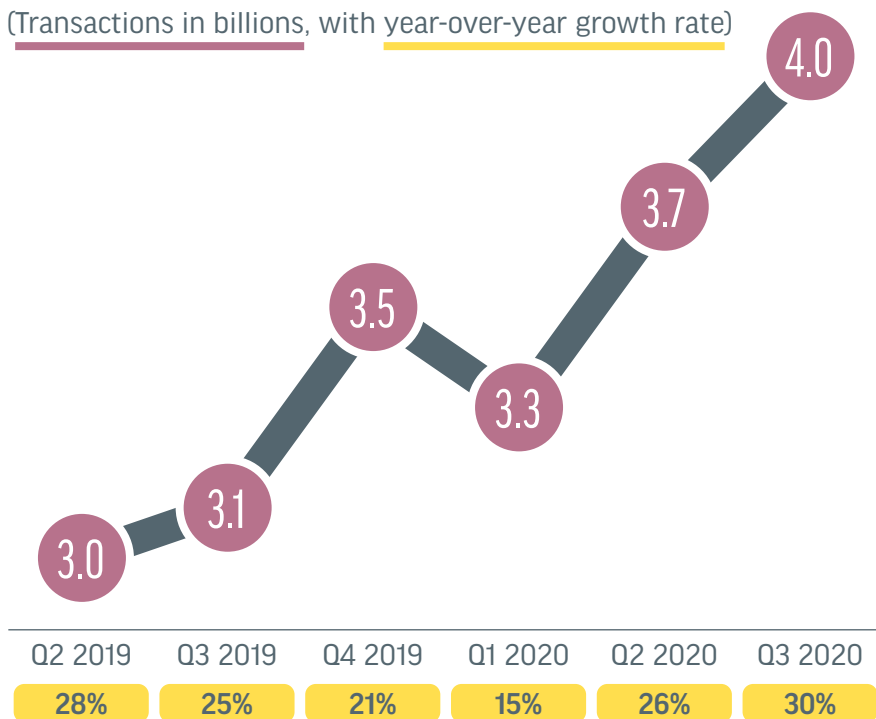
The timetable for the new features started in November with the bill-pay feature, and will progress toward “everything in place” by the end of next year, Schulman told equity analysts during a conference call to discuss PayPal’s third-quarter results.

The makeover comes as PayPal is adding net new accounts by the boatload and as a new Venmo-branded credit card is helping the peer-to-peer payment app head toward profitability. “We expect Venmo to make a positive contribution in 2021,” Schulman said, with revenue around \$900 million. “Venmo is clearly turning the corner.”

The San Jose, Calif.-based payments giant is adding more retail

TRANSACTIONS TAKE OFF

(Transactions in billions, with year-over-year growth rate)



Source: PayPal

chains for its QR code technology for contactless point-of-sale transactions (“PayPal Plots a New POS Course,” September). Ten “major merchants” are now signed to process the barcodes, including CVS, Nike, and Bed, Bath

and Beyond, Schulman said, adding that more than 500,000 small and micro merchants will be accepting them by the end of the year.

Another thrust into the physical point of sale involves a feature that

will allow PayPal users—and, later, Venmo wallet holders—to buy, hold, and sell cryptocurrency and spend it at stores by converting it into fiat money.

Some hints about the feature, which will embrace Bitcoin, Ethereum, Bitcoin Cash, and Litecoin, first emerged in June. The capability will be available in the U.S. market first, with the spend capability to come next year at all 28 million merchants accepting PayPal and Venmo.

There will be no fees to merchants beyond ordinary PayPal rates, the company says, since the transactions will simply be additional payments settled in dollars. “There’s no question digital currencies are going to be rising in importance. Our digital wallets can help shape the utility of those currencies,” Schulman said.

The crypto capability has been rolled out to 10% of the wallets so far, he added, with “demand” building for wider distribution.

PayPal has worked for years to gain a higher profile at the physical point of sale, an ambition that now appears with ironic overtones. While physical

merchants have been forced by the pandemic to beef up e-commerce capabilities, long-time e-commerce processor PayPal has plotted a course in the other direction. Already, Schulman said, “we’re seeing nice adoption in what we’re doing in the offline space. We want to capture what is a huge in-store opportunity.”

Another factor in that strategy is Pay in 4, launched at the end of August as PayPal’s entry in a rapidly growing market for no-interest installment credit offered at the point of sale. “Demand is tremendous,” Schulman said. “It’s going to be one of our big growth drivers.”

But Covid-related restrictions have also helped PayPal as stay-at-home consumers turned to e-commerce. At the rate that consumers are signing up, PayPal now expects to add 70 million net new active accounts by year’s end, with 15.2 million having been signed up in the quarter. The total at quarter’s end was 361 million (including the 28 million merchant accounts), up 22% year-over-year.

—John Stewart

CRYPTO COMES TO MASS PAYOUTS

As firms look for ways to speed up and secure simultaneous payments to multiple workers or contractors, cryptocurrency has entered the picture.

BitPay Inc., an Atlanta-based processor that offers crypto e-wallets, last month added a mass-payout service that will let companies pay in digital currency gig workers, contractors, and other workers worldwide.

The service, dubbed BitPay Send, is particularly positioned for international payouts, the company says, as Bitcoin and other digital currencies aren’t dependent on local exchange rates and transactions can be completed in minutes, “Blockchain payment adoption is growing because it offers an easy way to send and receive payments on a global scale,” said Stephen Pair, BitPay’s chief executive, in a statement. By contrast, he said, “traditional international payment methods are cumbersome, costly, and slow.”

Further, the new service does not require companies to buy or manage cryptocurrency and reduces the cost of distributing the payouts, BitPay says. Mass payouts are typically used when firms need to send earnings to contractors, such as ride-share drivers, in various geographies and at one time.

BitPay Send represents a new avenue in cryptocurrency services for the company. “Historically, BitPay has focused on allowing companies to receive crypto, but they also have a need to send crypto,” says Merrick Theobald, vice president of marketing. Many BitPay clients, he adds, work through affiliates in various parts of the world. “They were looking for a faster way to pay, and the affiliates

MONTHLY MERCHANT METRIC

Total Gross Processing Revenue, in Percent

Sum of total discount, total transaction fee revenue, and total other fee revenue divided by total volume

Q3 2019	2.434%
Q4 2019	2.434%
Q1 2020	2.440%
Q2 2020	2.351%
Q3 2020	2.346%

Note: This is sourced from The Strawhecker Group’s merchant data warehouse of over 3 million merchants in the U.S. market. The ability to understand this data is important as small and medium-size businesses (SMBs) and the payments providers that serve them are key drivers of the economy. All data are for SMB merchants defined as merchants with less than \$5 million in annual card volume.

Source: The Strawhecker Group © Copyright 2020. The Strawhecker Group. All Rights Reserved. All information as available.



were looking for a faster way to receive [payment].”

BitPay positions the service as a way for companies to pay contractors or affiliates in crypto without assuming the risk brought on by the currencies’ volatility. “One of our biggest challenges is that we did not want to buy and hold crypto, and having BitPay manage that risk was an important factor in choosing BitPay Send,” said Dan Sapozhnikov, president of AdGate, in a statement.

AdGate, which Theobald says has been trying out the new service “for a few months,” links digital advertisers with users of Web sites that offer rewards for engagement.

Firms can “jump in lightly” with the new service, Theobald says, by sending a small percentage of each payout via crypto. “The company would handle the fiat portion with any existing service they use,” he says. “We’ll handle the crypto portion.” He adds the integration work for BitPay Send is “very light,” with companies enabling the service “in a week or two.”

BitPay Send levies a fee of 1% for both domestic and cross-border payouts. The company says transactions are entered on the blockchain within seconds and confirmed in minutes. With cryptocurrency, recipients don’t need a bank account but, in the case of BitPay Send, they do need an e-wallet and a BitPay ID.

Observers say the new service could be useful for companies contending with unstable banking services or local currencies in other countries. But workers and affiliates will need certain assurances, they add.

“They are going to want to know that they will be able to easily and inexpensively exchange their crypto for a fiat currency to pay taxes and

otherwise spend the funds they received,” says Sarah Grotta, director of the debit advisory service at the consultancy Mercator Advisory Group.

The mass-payout service follows BitPay’s launch in June of a prepaid Mastercard that lets users convert

their crypto holdings into dollars or other fiat currency and spend it at stores. The card, issued by New York City-based Metropolitan Commercial Bank, comes with an EMV chip and contactless capability.

—John Stewart

CHECKING MEETS SAME-DAY FUNDING

With its new Business Complete Banking account, banking giant JPMorgan Chase & Co. has paired the old, a business checking account, with the new, same-day funding on mobile card payments.

Aimed at small businesses, Business Complete Banking includes a service called QuickAccept, which enables sellers to accept payment cards with a contactless card reader for their mobile phone or by manually entering cardholder data through the Chase mobile app (for more on card acceptance on mobile phones, see “Smart Phones Go Contactless,” page 16).

Key-entered transactions cost the merchant 3.5% of the sale plus 10 cents compared with 2.6% plus a dime for tapped, dipped, or swiped transactions using the reader, which costs \$49.95.

WePay, a software developer and payment facilitator Chase bought in 2017, handles digital onboarding of new businesses and risk underwriting, according to John Frerichs, WePay’s chief product officer for small and mid-size businesses. Transaction routing comes from JPMorgan Chase’s wholesale payments unit and offers same-day funding six days a week, with Saturdays excepted.

The service puts Chase, the nation’s largest bank by assets and proprietor of the biggest bank-owned merchant-



acquiring operation, in direct competition with fintechs such as Square Inc. as well as other banks for small merchants, which can generate higher margins on card services than big ones.

Unlike some competing services, Chase isn’t charging extra for same-day funding. Business Complete Banking also rewards users with fee waivers when they use more Chase products. Patrick Freeman, general manager for small-business deposits, claims no other big bank brings so many services for small businesses together in a seamless product.

“Business Complete is really our first integrated deposit account,” says Freeman. “The value proposition is very simple.”

Chase plans to enroll 3 million of its small-business customers for the service. “We’re going all-in,” says Freeman. DT

—Jim Daly

EMV GOES ECC

THIS CRYPTIC HEADLINE is quite telling, and it deserves proper attention from the payment community. Payment people know that EMV replaced magnetic-stripe technology, and that it sometimes takes uncomfortably long seconds to get the transaction approved. But few appreciate its big, innovative step in e-commerce.

Instead of repeated exposure of payment card content, the EMV card engages its authenticator in a dialogue, a conversation that leads to the authentication. This dialogue is based on dramatic cryptographic advances introduced almost 50 years ago. Shows you how long it takes to get science to the storefront.

For thousands of years, cryptography worked as follows: Transmitter and recipient shared a secret key used to encrypt the communicated secret and to decrypt it. It was applied in war and espionage, won battles, and shaped history. Alas, when payment went digital late in the last century, this mode became impractical. A customer spotting a new store on the Web has no shared key with this merchant. No shared key, no secure payment.

Fortunately, in the 1970s, three innovators at the Massachusetts Institute of Technology (Rivest, Shamir, Adleman) made a radical proposal: Use one key to encrypt a message and a different key to decrypt it. Why is this so revolutionary? It allows



BY GIDEON
SAMID

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the merchant to send the customer its encryption key so the customer can use it to encrypt his payment information and send it over. The merchant will then decrypt it with its decryption key.

Without possession of the decryption key, eavesdroppers can't compromise the payment information. This simple two-keys approach opened the door to e-commerce as we know it today.

For this idea to work, two conditions must be met. First, it should be impossible to decrypt the message with the encryption key, which is in the public domain. Second, it should be impossible to deduce the secret decryption key from the public encryption key in time to harm the parties.

The first condition is mathematically secured. The second condition is mathematically suggested—but not guaranteed. A faster-than-expected computer and/or a smarter-than-expected mathematician could compromise all e-commerce transactions and jeopardize online trade.


For decades, that MIT method, known as RSA, has been used to generate pairs of public and private keys such that the latter can't be extractable

from the former. It has apparently held up so far. The method is harder to compromise when larger keys are used, so we keep the keys growing, and plan to keep doing so. This requires changes to the standard, but we have no choice.

Technology, though, keeps moving. Some dark clouds are gathering from the corners of technology where quantum computers are being built. It has been shown that these new computers will crack RSA, rendering it useless. The proposed solution is called Elliptic Curve Cryptography (ECC), a different mathematical construct in which the private key, we hope, cannot be easily deduced from the public key.

The math behind ECC is more complicated and has a better chance to withstand a quantum-computing attack, while using smaller, more convenient keys. But the change from RSA to ECC is quite involved and will require a great deal of planning and design.

Society is maintained through payments, so a collapse of the underlying cryptography would be a social disaster. How long will RSA stand up? Would ECC hold up for long?

Trying to outrun the quantum predator is not sustainable. Payment requires a new vision. We at BitMint are proud to take part in the search for a more secure, sustainable payment climate. As EMV goes ECC, we go DCC: Durability – Consensus – Courage. 



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Trends in the Electronic Exchange of Value

COVID-19 AND THE NEW AMERICAN WALLET

WE ARE ALL LIVING DIGITALLY INFUSED LIVES as a result of the pandemic, and as the promise of a vaccine suggests that this may end in the coming year, the question is: will the changes stick?

One area of keen interest to retailers and the payments industry is mobile payments, specifically, payments made at the point of sale with a mobile device. This is different from mobile ordering or shopping, because in those cases, the payment is still made with a credit, debit, or prepaid card. (There are cases where they converge, and we'll come back to that.)

Mobile payments have seen a boost since the pandemic, though the data remain a little fuzzy because mobile transactions are often seen as “contactless transactions,” and it is not always clear if they involved a phone or card. For example, in April Visa reported that “31 million Americans tapped a Visa contactless card or digital wallet in March 2020, up from 25 million in November, with overall contactless usage in the U.S. growing 150% since March 2019.”

There are some specific signs pointing to investment and growth in mobile payments. In July, PayPal announced that it had launched a QR code app to allow people to use their PayPal and Venmo balances for mobile payments in 8,200 stores across the



BY BEN
JACKSON

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country (“The Sudden Ascent of QR Codes,” October). PayPal also struck a deal with InComm to bring the technology to other retailers.

However, the growth and investment in these tools are no guarantee that they will last beyond the present circumstances. As Claire Greene, a payments-risk expert at the Atlanta Fed, told *Digital Transactions News* in July, it is too soon to declare a permanent shift while we are still dealing with the pandemic. Old habits and merchant-acceptance costs could change how both individuals and merchants view mobile payments in the future.

Another headwind may come from the growth of options. Shoppers using their phones for communicating, navigating, or photographing may not want to sort through multiple payment options and may decide instead to reach for their cards. Also, uncertainty over whether a particular payment tool is accepted could make shoppers shy away from the potential embarrassment of using the wrong one.

Nonetheless, once the habit of using the phone to pay is ingrained, many people will continue to make it their default even after the Covid-19

pandemic has subsided. One area where retailers and mobile-payments providers have an opportunity lies in bringing payments together with other tools in a single app. Perhaps the most successful exemplar of this approach is Starbucks, which combines loyalty, ordering, and payments into one app. In an October earnings call, the company said mobile-ordering transactions increased from 18% of the total to 24% from the second to the fourth quarter.

Because people are being forced to adapt to new ways of shopping and making payments, now may be the time for retailers and issuers to try new tools and programs.

For example, the growth of contactless and mobile payments might give wearables new momentum. Previous attempts to embed payments into wearable devices delivered mixed results. Perhaps the most successful has been Disney’s Magic Band, which gives wearers the ability to complete payments as they tour the parks. But wearables—watches most likely, but perhaps even rings or other jewelry—could gain traction as contactless acceptance rises and people begin to grow accustomed to form factors other than cards. Context will be critical, but there is room for innovation.

However the disruptions play out, we will see a new American wallet after Covid-19. DT

acquiring

IT'S NOW FOR BUY NOW, PAY LATER

This versatile point-of-sale option is growing fast. Is it threatening credit and debit card traffic?

BY KEVIN WOODWARD

MANY MERCHANTS CAN'T SAY NO to buy now, pay later (BNPL) options, which are arriving in force as retailers and consumers gear up for a holiday shopping season that may be busier than usual.

Though BNPL programs have been around for years—think BillMeLater, which started in 2000 and later became PayPal Credit—a slew of recent entrants has propelled it to the forefront.

Point-of-sale lending is projected to account for 11% of total unsecured credit in 2021, up from 5% in 2015, according to Keefe, Bruyette & Woods, an investment firm owned by St. Louis-based Stifel Financial Corp.

Indeed, the rapid growth of POS lending is expanding the “overall pie, presenting an opportunity for both incumbent and new entrants,” the KBW research note says, adding KBW expects the product to “surpass private-label cards by 2021.”

Global BNPL volume is forecasted to increase to more than \$680 billion in transaction value by 2025, up from \$285 billion in 2018, according to Kaleido Intelligence Ltd., a London-based research firm. “This rise is fueled not only by changing shopper habits among younger demographics, but also by the overall shift to digital spending as a result of the Covid-19 pandemic,” the firm noted in its “Digital BNPL & EPOS Financing: Market Outlook 2020” report.

‘THREE YEARS OVERNIGHT’

A number of companies are boosting BNPL, including Affirm Inc., Klarna AB, Splitit Ltd., Afterpay Ltd., Sezzle, and Quadpay Inc. Broader payments companies are also getting involved—think PayPal Holdings Inc. with its Pay in 4 service, Visa Inc. and its installment API, Mastercard Inc., and American Express Co.—and offering similar interest-free short-term repayment plans.



POS financing is better integrated into the purchase process these days and offers better application experiences, KBW says. Newer business models are also fanning the growing interest.

One major factor, however, is the growth in e-commerce, something that already was organically increasing but received a major boost during the Covid-19 pandemic.



Millennials and GenZ 'are looking for transparent payment alternatives.'

—ANA BRASKAMP, SPOKESPERSON, AFFIRM

“While [e-commerce] was expected to happen gradually, I would say it has essentially jumped ahead three years overnight,” says Ana Braskamp, an Affirm spokesperson. “This has forced merchants to embrace the increase in online spending by offering modern payment options.”

POS financing offers, meanwhile, ride on the digital experience and the way it's able to be optimized online, says Adam Ezra, chief executive of New York City-based Quadpay.

Retailers like this payment option, though it typically costs a little more than traditional credit and debit card acceptance, because they are funded much more quickly and it can attract new customers.

Typically, Afterpay assesses a fee ranging from 4% to 6%, says David Katz, chief product officer. That's in line with estimates for Klarna's costs. Quadpay charges a 5.9% fee plus 30 cents as a sticker rate, says Ezra, though larger volume merchants may pay less. PayPal merchants pay their

standard fee, which, for U.S. online transactions, is 2.9% plus a fixed fee.

Katz says Afterpay settles immediately with the merchant. “We're taking on the risk,” he says. “We're bringing them a higher average order value and a higher conversion rate.”

Quadpay's Ezra says in some instances the impact on conversion rates and average order value is such that they can be as much as 20% and

60% higher, respectively. “It's about driving new customers and new business,” he says.

That's a big driver for merchants, says David Sykes, head of Klarna's U.S. business. Stockholm-based Klarna was founded in 2005 and entered the U.S. market a decade later. Its origins stem from consumer reluctance to enter bank card data online, especially when debit cards dominated a market such as Sweden's, Sykes says.

“By and large, the reason retailers are adding BNPL is [it] creates new customers,” Sykes says.

'INCREASINGLY SKEPTICAL'

For consumers, there is a psychological impact from splitting a large purchase. “\$50 sounds more accessible than \$200,” Sykes says. “The simple act of breaking that payment down increases someone's propensity to buy.” The average order value for a Klarna installment purchase is \$150, which is similar to that for Afterpay.

At Afterpay, Katz views the payment option as a budgeting tool for consumers. “We think that's part of what makes it so attractive, particularly to Millennials, who have shown some resistance to revolving debt and traditional credit products,” he says.

Indeed, card powerhouse Visa said its debit volume was up 22.7% for the quarter ended Sept. 30 compared to the same quarter last year, while its credit volume dropped 8.7%. Credit union service organization PSCU, in its first Tracking Transaction Trends report for Nov. 1, said debit card spend was up 16.8% compared to the corresponding week in 2019, while credit card use increased 4.7% for the same period. Afterpay says 90% of its transactions are made with debit cards.

That view is echoed by Affirm's Braskamp, who says Millennials—those born between 1981 and 1996—and Generation Z—born from 1997 onward—are affecting the payment options merchants provide.

“These two generations, which together make up more than half of Affirm's consumer network, are increasingly skeptical of traditional credit cards and banking services and are looking for transparent payment alternatives,” Braskamp says. “Additionally, because they grew up with monthly subscription models like Netflix and Rent the Runway, Millennials and GenZ often prefer predictable monthly payments versus payments that vary month-to-month like credit cards.”

While much of the action has been online, BNPL options have been moving into physical stores, too. Afterpay launched its in-store service in October. In Australia, where Afterpay has approximately 40,000 storefronts, 40% of its customers

made in-store Afterpay purchases, Katz says. Quadpay offers the same service, as do Klarna and Affirm.

'IMMEDIATE VALUE'

Whether used in-store or online, the transaction risk is minimal. Afterpay says its gross loss as a percentage of underlying sales for fiscal 2020 is 0.9%, a record low for the firm. "Our ability to keep losses very low is the secret sauce to Afterpay," Katz says.

Afterpay uses proprietary risk analytics to assess new customers. Like many other BNPL providers, it eschews traditional credit checks. "We keep the first transaction very low," Katz says. And because consumers tend to be repeat users, they strive to meet their payment schedules, lest they lose access to Afterpay's service.

Quadpay may do a so-called soft credit check, which doesn't affect credit scores, and that information feeds into its risk model, Ezra says. Other data may include consumers' activity at merchants, digital footprint data, such as the device type, and email addresses.

Affirm underwrites each transaction individually, Braskamp says, and uses machine learning to continuously refine its underwriting. "This enables us to support consumers by never extending loans that we don't believe can and will be repaid," she says.

But does BNPL cannibalize credit and debit transactions? The KBW report suggests the growth in POS lending is expanding the overall pie, "presenting an opportunity for both incumbents and new entrants."

In fact, BNPL methods rely on credit and debit cards as the underlying

methods for the installment payments. Between 80% and 85% of Klarna's transactions are made with debit cards, Sykes says. Affirm customers can pay directly from a checking account, but other options are available. Affirm distinguishes itself from the pack with loans offering varying interest rates over longer repayment periods.

Quadpay's Ezra views BNPL as additive to the merchant's mix. Remove the conversion lift from the BNPL equation, and in a majority of cases merchants will still see a high lift in average order value, he says.

"There aren't many things that e-commerce merchants can do that have a dramatic and immediate impact," says Katz. "Buy now, pay later is one of those that has immediate value." DT

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SMART PHONES GO CONTACTLESS

Software-based options are proliferating for merchants who want to use their own mobile phones for payment card acceptance. Are we entering the era of Square II?

BY JIM DALY

SQUARE INC. MADE PAYMENTS HISTORY a decade ago with its iconic dongle that enabled iPhones to accept payment cards (“How the Twitter Guy Changed Payments,” July 2019). Garnering less attention was the ability of Square’s mobile app to accept a payment manually when the seller entered the customer’s card data, no extra hardware needed.

Ten years later, purpose-built payment terminals are facing new competitive challenges. Despite initial trepidations about the security and utility of smart phones as de facto

point-of-sale acceptance terminals, the role of phones has only grown (“Your Smart Phone Is Your Terminal,” October). And with the Covid-19 pandemic arousing fears about touching POS terminals supposedly teeming with the coronavirus, the lure of using contactless-enabled chip cards and smart phones for mobile payments is stronger than ever.

Recent developments are cementing the new role of mobile phones as software-only payment terminals—so-called soft POS—for contactless transactions. In August, Visa Inc. invested in MagicCube Inc., a 6-year-old Silicon Valley tech firm that specializes in software-based contactless acceptance for commercially available mobile phones and tablets. The investment came at a time when Visa is ramping up its Tap to Phone initiative, a program aimed at expanding digital and contactless payments.

Earlier that month, Apple Inc. stunned the payments industry with its acquisition of Montreal-based Mobeewave Inc. on undisclosed terms. Mobeewave in October 2019 launched with Samsung Electronics Co. Ltd. a feature that allows mobile phones without dongles or other card-reader attachments to process



Photo: Visa Inc.

transactions via a near-field communication link between a contactless card and the device.

And in October, banking behemoth JPMorgan Chase & Co. rolled out a new checking account for small businesses that includes a feature called Quick-Accept, which enables a merchant to take contactless or contact payments on smart phones through the Chase mobile app (Trends & Tactics, page 9).

A VIRTUAL CHIP

Combined, these developments could be dubbed “Square II.” They’re growing in part because of new contactless specifications for commercial off-the-shelf mobile devices from EMVCo, the standards body of the major payment card networks, and rules for software-based entry of personal identification numbers from the network-sponsored PCI Security Standards Council.

“It is the logical evolution of the dongle plugged into the iPhone to have the payment capability built into the iPhone,” is how payments researcher Thad Peterson, a senior analyst at Boston-based Aite Group LLC, assesses MagicCube’s technology.

MagicCube founder and chief executive Sam Shawki calls his Santa Clara, Calif.-based firm “a device-replacement company,” and its i-Accept products are “the software equivalent of an EMV chip.”

I-Accept uses NFC for contactless communication between the merchant’s phone or tablet and the customer’s EMV chip card or NFC-equipped mobile phone with a payment wallet. The software can prompt for a PIN, to be entered by the customer, when the card or phone is tapped.

Neither MagicCube nor Visa would reveal the size of Visa’s investment



Tap to Phone ‘extends what we’ve been talking about for decades—expanding acceptance.’

—MARY KAY BOWMAN, SENIOR VICE PRESIDENT OF BUYER AND SELLER PRODUCTS, VISA

in a funding round that included other participants. “But it was a range designed to take us to deployment,” says Shawki, Visa’s former head of global remote payments. He adds that MagicCube has attracted a total of nearly \$20 million in investments from Visa and its other backers since its founding, and another funding round is planned for early 2021.

MagicCube, which says its technology works on the Visa, Mastercard, Discover, and American Express networks, in mid-2019 announced a venture with Japanese tech firm NTT Data Corp. to bring its so-called PIN-on-glass technology for entering PINs on off-the-shelf smart phones to merchants in Japan.

The NTT initiative hasn’t rolled out yet, however. But MagicCube already has achieved “live transactions in the field” in the United Kingdom, a project for which Shawki won’t reveal details. Next up are undisclosed countries the Middle East, Spain, and the U.S.

“What MagicCube has done is create a unique security technology that creates a virtual chip,” says Mary Kay Bowman, senior vice president of buyer and seller products at Visa. “It’s not specifically dependent on any hardware components, proprietary hardware, or ancillary devices. It does enable the mobile phone to be turned into a software point of sale.”

Adds Peterson: “MagicCube is essentially a virtual secure element. It frees up the transaction from the device.”

THE PAYOFF

MagicCube thus becomes another component in Visa’s Tap to Phone initiative, which aims to deploy contactless technology on millions of Android devices throughout the world. The program includes investments in tech firms as well as partnerships with merchant acquirers, financial-technology companies, and even some POS terminal makers. Visa announced 35 new ones in late October.

“After many investments, we’re up and live in more than 15 countries globally,” says Bowman, who worked at Square until leaving for Visa in 2019. Visa expects Tap to Phone to arrive in the U.S. next year.

The payoff for Visa: More non-cash payment options that produce more transactions on Visa’s network. “This extends what we’ve talking about for decades—expanding acceptance,” says Bowman.

The payoff iPhone maker Apple expects from Mobeewave wasn’t immediately clear. Neither company responded to requests for comment from *Digital Transactions*. The quiet acquisition didn’t become publicly known until late August, though it

'Oftentimes, phone-based payment options such as Apple Pay, Samsung Pay, and Google Pay offer higher levels of security than card-based payment options.'

—Ellen Linardi, head of product, Clover



Photo: Apple Inc.

may have closed six months earlier, according to *Digital Transactions News*. The unconfirmed price Apple reportedly paid was between \$120 million and \$150 million.

After launching its contactless payment system with Samsung in October 2019, Mobeewave in January followed up with a service that speeds up onboarding for merchants looking to exploit the capability. Now, however, tech observers expect Mobeewave will switch from the Android mobile operating system on which Samsung's phones rely to Apple's proprietary iOS operating system.

"Apple has clearly built a wall," says Peterson. "They're not letting Android users play in it."

'THE OPTIMAL PATH'

Meanwhile, payments companies that include Square and mega-processor Fiserv Inc. are working on their own smart-phone contactless projects. So where might all these initiatives leave dominant POS terminal makers such as France-based Ingenico and Verifone Inc.?

Mark Bunney, director of go-to market strategy, North America, at Ingenico's Atlanta headquarters for the U.S. and Canada, sees merchants' smart phones as a complement, not a mortal threat, to his company's many hardware and software offerings.

"We want the customer to be able to choose what the optimal path is," says Bunney, whose company was acquired in October by French payments firm Worldline S.A. He notes, however, that Ingenico in recent years has expanded its roster of processing and software-based products.

"That's the path Ingenico has been going down, offering more software and services," Bunney says. "It's a very logical evolution."

But payments-accepting hardware, for example in unattended merchant locations, will always be needed, according to Bunney. "You still need those points of interaction. Mobile in particular is really challenging because there isn't a single solution that meets all the use cases and customer types," he says.

Brookfield, Wis.-based Fiserv's

Clover unit, which serves small and mid-size merchants, provides a long line of payment software and POS hardware. Ellen Linardi, Clover's head of product, isn't worried about displacement. In fact, she admires the level of security leading mobile-payment services provide.

"Oftentimes, phone-based payment options such as Apple Pay, Samsung Pay, and Google Pay offer higher levels of security than card-based payment options," Linardi says in an email message.

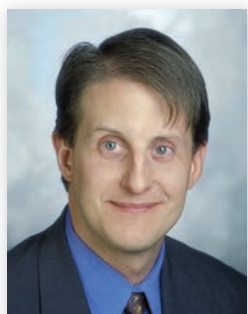
A spokesperson for San Jose, Calif.-based Verifone, the largest U.S.-based POS terminal maker, did not respond to a request for comment.

'A REAR-GUARD ACTION'

While the use of mobile phones as contactless-payment acceptance terminals is growing, it's still uncertain how much share merchants' phones will grab from providers of purpose-built POS hardware.

The providers "can go either way," says Aite's Peterson. "If they view it as a threat they're going to be fighting a rear-guard action for the foreseeable future."

He notes a conversation he had with an executive of fast-growing payment processor Stripe Inc., who asserted the data from payment transactions has become more important than the machinery. "It's that value from [the] POS system that really matters," says Peterson. **DT**



'You still need those points of interaction.'

—MARK BUNNEY, DIRECTOR OF GO-TO MARKET STRATEGY, NORTH AMERICA, INGENICO



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THE E-COMMERCE BOOM

Ecommerce has been setting records during the coronavirus pandemic, but processors should be thinking about ways to innovate. For example: how to make transactions simpler, faster, and more secure?

BY PETER LUCAS

PRIOR TO THE CORONAVIRUS PANDEMIC, e-commerce was big business for merchants and processors. But since the pandemic struck in March, online business has been on steroids and shows no signs of slowing down.

During the second quarter of 2020, e-commerce sales in the United States totaled \$211.5 billion, or 16.1% of total retail sales, according to the Department of Commerce—up from \$138.9 billion, or 10.8% of total sales, in the same period a year earlier.

That's with travel and ticketing—two big-ticket categories—suffering substantial drops in volume.

More telling is that the data shows more than \$1 in every \$5 was spent online in Q2 2020—the highest penetration for e-commerce of any quarter

or year on record, according to Digital Commerce 360—Retail.

Nor is there any slowdown for the holiday shopping season. ACI Worldwide Inc. predicts a minimum 20% to 30% increase in holiday e-commerce sales this year compared to 2019.

No wonder. With merchants rolling out holiday shopping deals earlier than ever, e-commerce volume rose 23% year-over-year in October. In September, ACI predicted that global e-commerce sales would rise

27% in the fourth quarter compared to 2019.

The big reasons merchants began promoting holiday shopping so early were concerns about inventory shortages closer to Christmas and longer than usual shipping times, says Erika Dietrich, vice president for global risk services at Naples, Fla.-based ACI.

On the consumer side of the coin, she says, e-commerce surged because of two main factors: online shoppers are purchasing with greater frequency, including setting up subscriptions to automatically order household staples; and numerous first-time buyers are flocking to the channel.

If a merchant didn't have an e-commerce channel prior to the pandemic, payment experts say, they immediately set one up. Meantime, merchants that already had a digital sales channel began pouring more resources into it to enhance the user experience—such as by adding digital-wallet acceptance—to grow sales and keep customers coming back.

For many small and mid-size merchants, e-commerce has been the lifeline that has kept them afloat in the midst of a worsening pandemic that cut instore traffic to a fraction of pre-pandemic volumes.

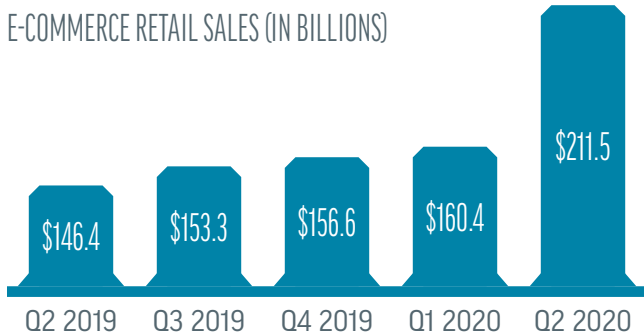
That's good news for payment processors, because even when a coronavirus vaccine becomes widely available and life returns to so-called normal, most of the gains in e-commerce volume will be retained, payment experts say.

The reason: many new online shoppers have become hooked on

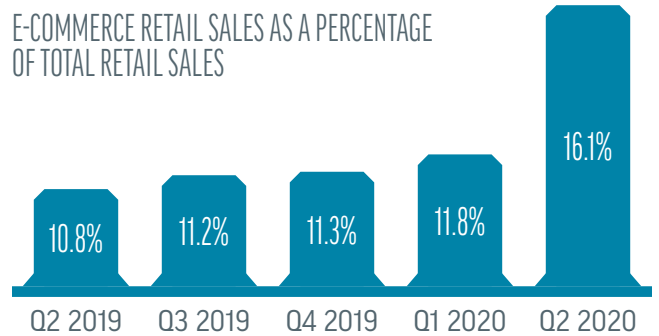


HOW ONLINE COMMERCE HAS EXPLODED

E-COMMERCE RETAIL SALES (IN BILLIONS)



E-COMMERCE RETAIL SALES AS A PERCENTAGE OF TOTAL RETAIL SALES



Source: U.S. Census Bureau

the convenience and safety of the digital channel for everything from groceries, clothing, and bedding to electronics, camping supplies, and home-gym equipment.

“We expect a lot of this volume to stick once Covid subsides, especially with many first-time buyers becoming recurring customers through subscriptions,” Dietrich says.

STREAMLINING CHECKOUT

But there’s some groundwork to be done before processors can begin cashing in, experts say. They will need to push the boundaries of their technology to enhance the customer experience, secure the data around all those new transactions, and keep a lid on fraud.

“For e-commerce purchases, customers expect a direct and quick payment experience,” says Suneera Madhani, chief executive and founder of Orlando, Fla.-based processor Fattmerchant Inc., by email. “In response, many merchants are looking to provide a simple shopping experience to their customers. This is paramount in a time when conversion metrics really matter due to the decreased demand and/or limited availability of in-store purchasing options.”

To reduce friction, she says, merchants need to be thinking about offering payment capabilities that offer customers’ preferred methods and that also offer a quick and easy checkout.

“Having a seamless checkout process is part of the greater shopping experience,” Madhani adds. “It’s why providing familiar and quick options to access credit card details via vault tokenization services has exploded. Additionally, digital wallets such as Secure Remote Commerce have the ability to provide merchants with the desired user experience by enabling Apple Pay, Google Pay, Masterpass, Visa Checkout, [among others].”

Developed by the four major card networks, Secure Remote Commerce is a technology standard that streamlines online purchases, whether through a mobile device or a laptop, by mimicking the in-store experience of a single payment terminal that accepts multiple card brands.

To use SRC, which has since been renamed “click to pay,” consumers must create a profile through merchants offering the service. Profile data includes the consumer’s email address, which serves as her click to pay ID, and mobile phone number. Next, the consumer enters her payment

credentials, i.e. card number, expiration date, card-verification value code, and billing address. Upon completion of the profile, a six-digit verification code is generated.

To make a purchase, a consumer enters her click to pay user ID, thereby eliminating the need to enter payment card data and billing address information. Adopting click to pay will enable merchants running transactions on the card brands’ respective networks to offer a one-click checkout experience similar to that of PayPal or Amazon.

“The convenience of cards on file has been a massive game-changer for the merchants’ ability to compete against legacy players (Amazon, eBay, etc.) that used that as their differentiation,” says Madhani.

Streamlining the payment experience can also help reduce shopping-cart abandonment as consumers don’t have to fill out multiple data fields to complete a transaction. In May, Visa said it found that without SRC in place, a consumer must negotiate an average of 23 fields to complete an online purchase.

Experts have warned for years that having to enter too much payment data can cause a consumer to walk away in a heartbeat.

In addition to one-click convenience, click to pay limits exposure of a consumer's card data by not requiring it to be manually entered and secures the transaction through cardholder authentication and tokenization.

"Click to pay enables security and convenience that can give consumers more confidence to transact with merchants that did not have the resources to develop a one-click payment option on their own," says Andrew Hopkins, senior vice president of global products for Discover, which rolled out click to pay in October.

"Small merchants are realizing they need to move into e-commerce and need tools to create a better user experience that helps them compete with larger players," Hopkins adds.

Although all four card networks have rolled out click to pay, the technology has yet to scale in a meaningful way, making it difficult to gauge its impact on the customer experience, says Nandan Sheth, head of our global digital commerce for Brookfield, Wis.-based processor Fiserv Inc., which gained considerable heft in e-commerce via its \$22-billion acquisition of First Data Corp. in 2019.

But the technology appears to picking up steam. In May, Visa revealed it had added more than 10,000 U.S. merchants to click-to-pay since January. The service also claims 37 million active Visa users. Visa did not make executives available for an interview.

While payment experts are confident click to pay will achieve mainstream adoption, Madhani cautions that any competitive advantage it offers may be short-lived as more stores offer similar experiences. "Increased competition with a similar look and feel means there must be ... value added to the checkout/

shopping experience for the consumer to experience a deviation from expectations," Madhani says.



BEYOND BOUNDARIES

While reducing friction at checkout can help improve the customer experience, payments experts say processors and merchants need to think beyond the traditional boundaries of shopping at a Web store. In other words, they need to be thinking about technology outside traditional e-commerce channels.

One technology getting a good look is voice activation. The technology is already gaining attention in physical-

world situations. It can allow a consumer to voice-activate a gas pump and pay for the purchase using an app on her mobile phone in the comfort of her car, says Sheth, who adds that Fiserv has partnered with a third-party to develop such a technology.

"We are seeing augmented reality in e-commerce that enables a consumer to virtually try on a pair of glasses through their phone or computer, and voice-enabled commerce as a natural extension," Sheth says. "The aim is to enable a digital wallet beyond payment and provide ways to create a richer user experience in an omnichannel environment."

One way for e-commerce merchants to increase customer engagement is

'Providing options to access credit card details via vault tokenization services has exploded'

—SUNEERA MADHANI, CHIEF EXECUTIVE AND FOUNDER, FATT-MERCHANT



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COVID'S CURVE

Average monthly visits to retail e-commerce sites worldwide, in billions



Source: Statista

through the aggregation of credit and debit cards' primary account numbers (PANs) to identify an online shopper, at least by number. Each time the PAN is used. Armed with this information, merchants can create a customer profile based on the PAN.

Merchants can then serve up promotional offers or requests to enroll in their loyalty program. "Unless a shopper is enrolled in a loyalty program, the transaction is essentially anonymous," says Sheth, who adds 7 million new buyers over the age of 40 will begin purchasing online by the end of 2020.

Fiserv says that digital adoption is occurring across multiple generations from the Baby Boomers on down

Another way to enhance e-commerce is to digitize invoices and embed payment links. Waltham, Mass.-based BlueSnap Inc., which provides online payment solutions for e-commerce, business-to-business, and software-as-a-service companies, has seen a rise in digital invoicing since the pandemic hit. Small merchants, such as landscapers or tradesmen, are using digital invoices to bill customers and collect payment as face-to-face transactions for these services become less common.

The technology is also being leveraged by manufacturers and B2B suppliers, says Ralph Dangelmaier, BlueSnap's chief executive. BlueSnap recently signed a deal with motor-oil manufacturer Valvoline Inc. to digitize invoices for fleet operators' services. The embedded payments link supports a variety of payment options, from major card brands to ACH payment and foreign payment options, such as Alipay.

"We've been offering digital invoices for a couple of years, but it started to catch a lot of people's attention when the pandemic hit, because a lot of workers are not going into the office and remain hesitant to open mail right away," Dangelmaier says. "It's a more efficient way to invoice and receive payment."

While many consumers are buying online and having items shipped to them, a significant portion are using buy online, pick up in store (BOPIS) options as a way to receive items sooner, as many merchants are experiencing delays fulfilling orders from their warehouse or with shipping carriers, ACI's Dietrich says. ACI predicts a 40% jump in BOPIS transactions during this holiday season.

Given the decrease in foot traffic merchants are experiencing during

the pandemic, it makes sense to use their brick and mortar stores as warehouses. "We are seeing small merchants adopt BOPIS and chains that offered it pre-pandemic dedicate more lanes for it," Dietrich says.

As with any dynamic payment option, the need to secure e-commerce transaction data and prevent fraud is paramount as criminals follow the money. Unsurprisingly, online merchants' interest in tokenization, which replaces card data with non-sensitive data, has risen, payment experts say.

The same is true for 3D Secure, another network-sponsored technology that provides an additional security layer for online credit and debit card transactions by enabling merchants and card issuers to authenticate the consumers making the transactions. The protocol has been adopted by Discover, Mastercard, and Visa. "We are seeing issuers get a lot more sophisticated with their use of 3D Secure, especially outside the U.S.," says Sheth.

Use of artificial intelligence to identify suspect transactions—and prevent false positives for suspected fraudulent transactions—is another technology attracting interest among merchants. E-commerce payment platform provider Adyen, for example, is urging e-commerce merchants to

adopt its Revenue Protect application. Revenue Protect uses transaction data gathered by Adyen to build intelligent risk profiles that detect fraud and lower false positives.

“There is a strong emphasis on fraud prevention and data security in the online channel, which is why we are seeing more investment in artificial intelligence and 3D Secure,” says Brian Dammier, president, North America, for Adyen. “Version two of the 3D Secure protocol is a more mature fraud-prevention tool and lessens friction at checkout.”



'A DIGITAL LANDSCAPE'

If nothing else, the explosive growth in e-commerce volume during the coronavirus pandemic is pushing

“There is a strong emphasis on fraud prevention and data security in the online channel.”

—BRIAN DAMMIER, PRESIDENT, NORTH AMERICA, ADYEN



merchants to reassess their digital channels and invest more in them. Indeed, many merchants unprepared to offer in-store contactless payment options found they were able to shift touch-wary consumers to their online channel when the pandemic struck.

Many merchants were not prepared to make changes to support contactless in a timely manner, causing many of them to struggle. “Many were fortunate, however, to have access to online payment solutions and online shopping carts where sales could

continue despite the circumstances,” Madhani says. “Now they are looking for new ways to convert and capture walk-in traffic in a digital landscape.”

Looking ahead, payment experts recommend e-commerce merchants seek ways to leverage customers’ changing purchasing behaviors over the last nine months to differentiate their businesses. “With more merchants offering digital payment channels, and more consumers responding, enhancing e-commerce and digital channels is vital,” says Madhani. DT

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HOW TO SHIFT TO REMOTE PAYMENTS

Payment at a distance has become a priority as a result of the Covid-19 pandemic. Here are five ways to make that shift go smoothly.

BY JOHN MINOR

John Minor is chief product officer at PayNearMe Inc., Santa Clara, Calif.

THE COVID-19 PANDEMIC has transformed the way we live and work in countless ways, and that includes how we pay our bills. Consider a recent MasterCard survey in which more than 51% of U.S. consumers said they were using some sort of contactless payment. Some 30% started doing this due to Covid-19.

Remote payments are on the rise as businesses seek contactless payments, as well as ways to enable payments to be made from a distance, to protect customers and employees alike. Remote payments are a win-win. Customers win through greater flexibility to pay when, where, and

how they prefer. Businesses, in turn, win through saving the time, risk, and labor costs associated with in-person payments.

Yet, if you're feeling ill-equipped and overwhelmed at the breathless pace of this remote-payment trend, you're not alone. We're seeing years of adoption trends taking place in a span of months. That means companies must act quickly to sharpen their game, moving from a short-term survival mode to a comprehensive long-term strategy. As you do, here are five strategies for a successful transition to remote payments:

1. Give customers as many self-serve options as possible, including offsite cash payments

Seventy-eight percent of cash-preferred customers still want or need to make bill payments using cash, even during Covid-19, according to PayNearMe user data. But that doesn't mean they have to pay with cash at your branch location. Lenders are enabling customers to pay their bills with cash at the neighborhood retail locations where they regularly shop, like 7-Eleven and CVS Pharmacy stores. They simply use a reusable bar code sent by the lender via text message.



Another growing group of customers prefers paying bills using a digital wallet such as Google Pay or Apple Pay, or by transferring money via the automated clearing house network. Of course, credit and debit cards remain very popular forms of payment. Your system will need to accommodate all of these payment types if you hope to shift to a remote-pay environment.

Finally, make sure your payments platform is compatible with all digital channels, including phones, tablets, and computers, and even interactive voice response for phone-in payments. Your customers will likely have different comfort levels with the different channels used for making remote payments, based on their age, education, and experience.

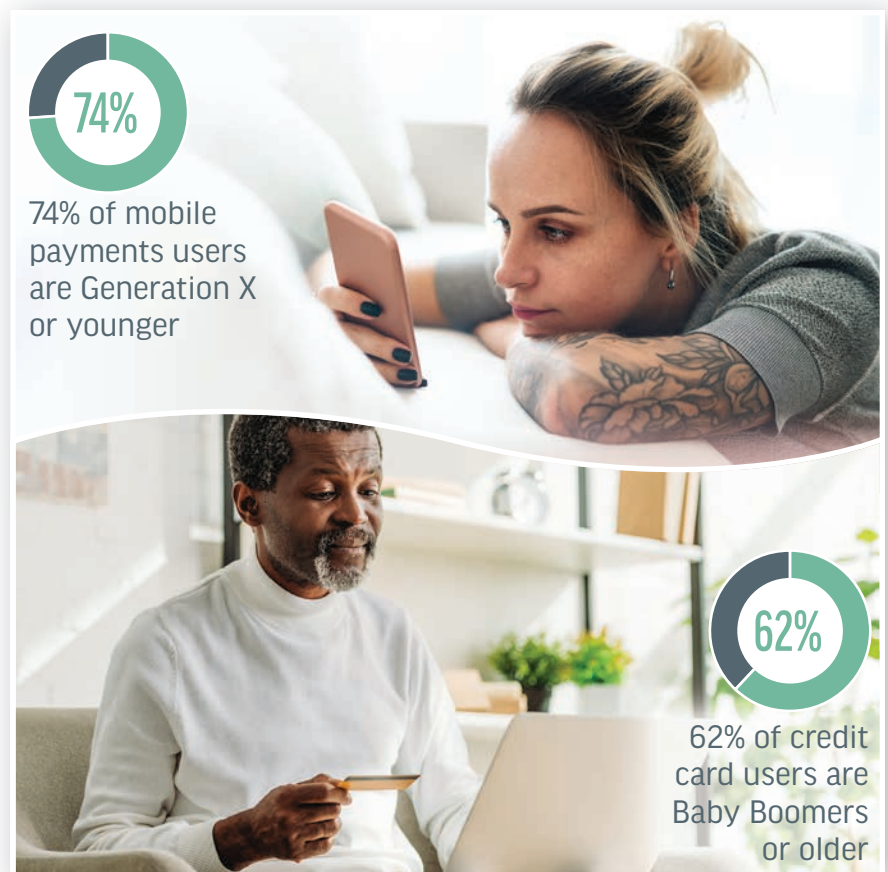
In a survey by the Pew Charitable Trusts, 56% of respondents said they had paid a bill by mobile phone in the past year. Yet 74% of those who used mobile payments were members of Generation X or younger (born after 1964), while 62% of those who used credit cards to pay were Baby Boomers or older (born between 1946 and 1964).

By offering all available options, you're more likely to boost adoption of remote payments from all segments of your customer base and improve customer satisfaction in the process.

2. Walk customers through the transition

Some consumers have adopted remote payments on their own, but most are creatures of habit and so are averse to change. That means shifting their payment habits will require two things: suggestion and support.

First, businesses should take every opportunity to tell their customers



Source: Pew Charitable Trusts

that they offer online and automatic bill payment options, and that mobile payment and autopay are beneficial. Put that suggestion on every bill, every email, and every push notification. Have customer-service representatives mention it every time they interact with a customer: “May I help you set up automatic payment for your convenience?” or “Did you know you can add this payment to your Apple or Google wallet?”

If the customer shows interest in remote payments, make sure the process is easy, with as few steps as necessary. Many lenders have taken to printing a QR code on every bill, which allows the customer to scan the code with their phone and pay immediately with a few simple clicks.

For customers accustomed to calling your business to pay by phone,

a service representative can offer to push a text or email to the customer with a link to register for autopay. The agent should stay on the line while the customer completes and verifies the process to make sure it goes smoothly.

As customers build trust in remote payments and feel empowered to complete their own transactions when, where, and how they prefer, they will come to appreciate the freedom and convenience. Your task is simply to convince them of that truth and get them started in that new practice.

3. Engage with your customers in the ways they prefer

Consumers are bombarded with messages and marketing every day, on email, television, and social media.

Stand out by providing communications selectively and in the manner they prefer. Do they want to receive communications by email, text, or mail? Do they find push notifications helpful? Make it easy for them to choose their preferences.

Then, tailor communications to different scenarios, using the appropriate messaging and tone. For instance, one reminder alert 15 days before payment is due, another if payment is overdue, and so on. Translate communications into the customer's native language as appropriate. This is par for the course in today's multicultural society.

Again, in every communication, offer options for self-service and make that process easy. When customers know your communications apply to them and make their transactions easier, they will pay attention when your messages arrive.

4. Help remote workers remain productive

If your customer-care centers have moved partially or completely to home-based operations, you must consider how to support your customer-service representatives along with your customers.

Make sure your workers have all the tools and training they need to excel and remain productive, even from the safety of their home offices. That includes a payment system robust and smart enough to accommodate different scenarios (missed payments, insufficient funds, partial payments, and so on).

The interface should walk agents through solutions without delay or confusion. Clean up the user interface so your staff works with the



We're seeing years of adoption trends taking place in a span of months.

smallest number of fields necessary to complete the tasks, and provide them with easy-to-follow decision trees. The workflow should drive your employees through the process in a smooth and logical way.

By making your employees' jobs as easy as possible, you'll reduce their stress and equip them to do their best work with customers.

5. Consider remote-specific compliance issues

Staying PCI- and Nacha-compliant in a remote-pay environment offers some new challenges, especially when your staff is no longer in a single, supervised call center. Here are a few ways to reduce your compliance scope:

- ▶ Have agents encourage self-pay so they don't need to take payment information over the phone. They can offer to send a link in an email or text, and stay on the phone while the customer completes the transaction. This avoids the challenge of protecting customer information in a highly dispersed work environment, ensuring agents never touch sensitive customer payment information.
- ▶ Establish an interactive voice response system to prompt

self-pay for willing customers. A well-developed IVR can help customers complete a payment by phone without talking to a live representative.

- ▶ Have customers authorize autopay registration via email or text. If the agent walks the customer through autopay setup and then sends the customer an electronic message to authorize independently, the agent does not have to record the call. This protects your company from violating Nacha operating rules required for ACH payments.

Implementing a comprehensive remote payment system offers many opportunities to streamline operations, reduce overhead, and improve customer satisfaction, all while preparing for what may be continued Covid-19 uncertainties.

Remember that your payment-platform vendor is an excellent resource to help you adapt your systems and procedures. With their help, you can build long-term, positive relationships with your customers using the best technology available. It's a necessary strategy in today's increasingly self-serve marketplace, and a worthy investment in the future of your company. DT

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TIME TO GO BIG(GER)

A burgeoning opportunity awaits payments firms that can integrate with software houses to serve mid-market clients.

BY **BEN WEINER**

Ben Weiner is chief strategy officer at Paya.



MID-MARKET BUSINESSES are increasingly faced with the need to execute on multiple priorities at once, from enhancing customer experience to increasing back-office efficiency to finding ways to drive additional revenue. As a result, they need a comprehensive and differentiated approach to commerce, particularly amid a critical stage of growth for their organization.

Integrated payment functionality within the core software of the business has emerged as the preferred way to accomplish these goals in a dynamic and increasingly online business climate.

One of the most important decisions that a business makes after graduating from the small-and-medium-size-business category is the software it will use to manage operations and fuel continued growth. The payments module, and how it enables revenue collection and workflow, is a critical component of this strategic decision.

The integration of payment functionality into software allows a business to invoice customers electronically (either business-to-consumer or business-to-business), populated with data directly from the software; accept multiple and diversifying methods of payment; and reduce the overall complexity of revenue collection and accounting.

This brings a number of tangible benefits, including the potential for increased revenue, shorter accounts receivable cycles, and enhanced decision-making from transaction data and business analytics.

Additionally, on the payor side, integrated payments significantly enhance flexibility and convenience. They do this by giving business and consumer payors the ability to pay invoices directly from an email or portal, offering more choices both in terms of payment method (e.g., credit card, debit card, virtual card, automated clearing house, etc.) and medium (e.g., computer, phone, tablet, etc.).

GROWTH TAILWIND

For software providers, the middle market represents a massive greenfield opportunity to offer and monetize payment solutions. A number of high-growth industries—such as health care, local governments and municipalities, nonprofit, manufacturing and distribution, and education—have been slow to adopt electronic payments due to the level of complexity involved in serving these verticals.

Because these verticals have traditionally been underserved, software providers that offer a differentiated bundle with integrated payments are

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experiencing higher win rates and customer retention. For the software provider, integrated payments also introduce an incremental revenue stream by monetizing the transaction volume of their customers, in addition to their software-as-a-service fees.

Further, software providers in the middle markets look to partner with a provider of integrated payments rather than build these solutions themselves. That's because they are often highly focused on enhancing their own product rather than building payment functionality.

These providers also quickly realize there are a number of barriers to entry associated with building payments capabilities themselves, including lack of industry-specific regulatory knowledge, the costs of developing proprietary IT infrastructure, and the risks associated with the movement of funds and sensitive payment information.

This late adoption presents a handful of attractive opportunities for software providers and their payment partners. First, the majority of commerce in these markets is still done through paper checks and cash, which can result in costly errors and inefficiencies. High-quality payment modules are effective in converting

these transactions to electronic forms of payment.

These modules are successful by reducing the complexity in making these payments through invoicing electronically, offering recurring payments, and storing cardholder information securely. This offers tangible benefits to the business and their customers.

Further, the majority of prospects and clients that a vertically focused mid-market provider targets do not currently have an integrated payments partner. As a result, there is often a large base of existing customers running the partner's software, into which the provider can sell payments. This offers a meaningful growth tailwind benefiting the customer and the software vendor as well as the integrated-payments provider.

THE COVID EFFECT

A good example of the power of integrated payments can be seen in the municipal vertical. More than 50% of water bill and property-tax payments nationwide are still being made in paper form, typically in person at the municipality. As a result, local governments are left with burdensome accounting and reconciliation

processes and a high percentage of delinquent or missed payments.

This trend is driven, in large part, by a lack of effective electronic payment offerings that are focused on this market, particularly those integrated into the existing software that powers the municipality.

By incorporating payments into the core software of the municipality, local governments can send water and tax bills with critical data to their residents via email. This also gives residents the ability to pay securely from their home and set up recurring payments and reminders to help them better manage future payments.

Though businesses were realizing the benefits of integrated electronic payments before the pandemic, Covid-19 accelerated this trend. With the possibility of in-person payments eliminated, businesses have needed to turn to digital means to collect revenue quickly. While this has resulted in a short-term surge in adoption of integrated electronic payments, the abrupt shift toward online commerce is unlikely to revert to pre-pandemic behavior, given the clear benefits for the payor, the business, and the software provider.

As electronic payments continue to surge, the adoption of payment functionality inside of business-management software will become increasingly critical. This combination benefits businesses and their customers through enhanced workflow and improved customer experiences, while differentiating the software provider by offering the bundle to its customers.

This trend is becoming increasingly important for businesses in the middle markets given their heightened need for efficiency through continued growth and evolution. **DT**

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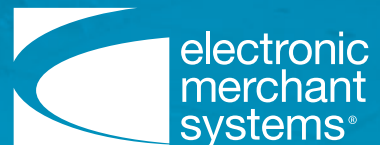
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