# TRANSACTIONS

Trends in the Electronic Exchange of Value

14TH ANNUAL

# THE 10 MOST ISSUES IN

EMV Anxiety at the Pump Can We Trust Online Identities? Screen Scraping And Open Banking Will Contactless Fade Post-Covid? Durbin Routing Rules Redux?

# PRESSING E-PAYMENTS

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THE GIMLET EVE The Fed Inches Toward Real Time

6

4

#### **TRENDS & TACTICS**

#### Is FedNow Moving Fast Enough?

Even banks are far from united on this question. Meanwhile, FedNow is planning a pilot. Details to come.

#### As a Deadline Nears, Relief for EMV at the Pump

TNS offers gas stations a break on telecom-installation costs to support EMV.

#### Afterpay Comes to the Cash Register

It's yet another big step for the fast-growing point-of-sale installment lending trend.

#### PayPal, Venmo, And QR Codes

PayPal's new Visa card for Venmo features an NFC chip for point-of-sale transactions and a QR code to make P2P payments.

Plus, Security Notes describes a remedy for attacks via quantum computing; and Payments 3.0 sketches what a Biden administration would look like for payments.

#### **ACQUIRING**

13

#### Poised for Huge Growth— And Potential Trouble

The rapidly rising payoff for acquirers from the state-by-state legalization of online sport betting comes with flashing caution signs.

#### **STRATEGIES**

16

#### Contactless Payments: We Can Do Better

Yes, consumer usage has grown since Covid-19 set in, but a lack of coordination among industry players has led to confusion at the point of sale.





#### **STRATEGIES**

27

### Subscriptions, Online Services, PayPal, And Covid-19

The pandemic is changing payments, but it's also reworking payments strategies. Here's how the industry will have to react in the next few years.

#### **ENDPOINT**

30

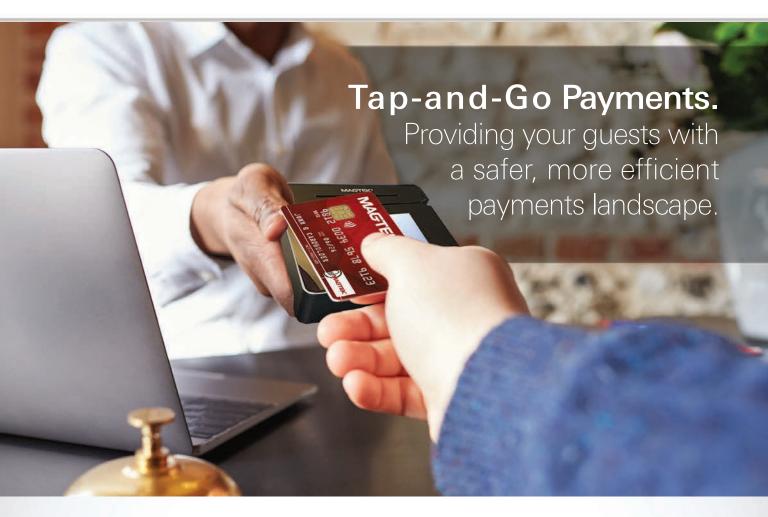
### The Real Deal for Real-Time Payments

Multiple real-time services may flourish, but don't discount the Fed's ability to corner volume.

Cover Illustration: Jason Smith, 123RF.com

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### the gimlet eye

# THE FED INCHES TOWARD REAL TIME

IN AUGUST LAST YEAR, when the Federal Reserve announced it would jump into the real-time payments arena, proponents of the idea were elated. A public sector competitor would be needed, they argued, to offset the rapidly advancing network at The Clearing House Payments Co. LLC, an entity owned by 25 major banks. And this doesn't even take account of other private-sector initiatives, including Early Warning Services LLC's Zelle network and the major card networks' push-payment services.

But what many may not have counted on is that the Fed would take its time. It no sooner announced its entry in the real-time arena than it said its FedNow service wouldn't go live nationally until 2023, or 2024 at the latest. In the world of digital payments flows, that's an eternity.

Not only that, the Fed's competitors are already up and running. TCH announced in September its Real Time Payments service is already able to connect, directly or through core processors, to 56% of U.S. deposit accounts, and has the potential to link to 70%.

So proponents of the Fed initiative were already disappointed when officials of the central bank said this summer they were sticking to the timetable. And last month they reiterated that point. They did announce they were seeking "expressions of interest" from financial institutions, processors, and other parties to participate in an upcoming pilot. But, 14 months after the Fed publicly announced the FedNow project, those officials were silent about the pilot's details.

Experts are split on the question whether the Fed's deliberate approach will allow competing private-sector services to lock up volume (see our lead story in Trends & Tactics on page 6). "Financial institutions are moving forward with other real-time payment plans due to the extended timeline of FedNow," Erika Baumann, an analyst at Aite Group, told us last month. In a survey Aite conducted with more than 100 financial institutions, just 10% said they'd wait for FedNow, even though they had originally intended to move ahead with another service.

But the Fed can't be underestimated. It is the nation's central bank, and as such wields immense power. Eric Grover argues in our Endpoint column on page 30 that, while TCH itself may not want to interoperate with FedNow ("why would it help a competitor become viable?" he asks), its owner banks "will have to bend the knee for the Fed" and pressure TCH to play ball.

We'll see how that plays out. Our own take hasn't changed since the Fed's announcement that it was jumping into real-time payments: It would have been better served to leave this business to the fast-moving private sector.

John Stewart, Editor | john@digitaltransactions.net

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### trends & tactics

### IS FEDNOW MOVING FAST ENOUGH?

The announcement from the Federal Reserve last month of a pilot for the FedNow real-time payments service may represent an important stage in the development of a service not expected to go live until 2023 at the earliest. But observers caution rival services have already made headway with key market participants.

"Financial institutions are moving forward with other real-time payment plans due to the extended timeline of FedNow," Erika Baumann, senior wholesale banking analyst at Aite Group, says in an email message. The Fed first announced its intention to develop FedNow in August last year, and this summer reaffirmed its timeline for the project.

In its latest move, the Fed has invited financial institutions and service providers among the 700 members of its FedNow Community of entities supporting the real-time service to participate in a pilot. It is looking for "expressions of interest" by Nov. 16.

"We have a strong foundation with our initial service design and are now in the next phase of development designing enhanced features and functionality," said Nick Stanescu, senior vice president and FedNow business executive with responsibility for product management, in a statement released with the announcement.

The pilot will consist of three phases: advisory, testing, and closed-loop production. Further details, such as a start and end date, were not immediately available. "The announcement of the pilot, and recruitment of participation, is a strong signal back to the market that work is progressing. However, there is noticeable ambiguity of timing and details about the pilot," notes Baumann.

"Many pilot program details have yet to be announced," says a spokesperson for the FedNow project.

A range of competing real-time services is already available, including The Clearing House Payments Co. LLC's Real Time Payments facility, push-payment services from Visa Inc. and Mastercard Inc., and the Zelle peer-to-peer payment network, which is backed by some of the largest banks in the country. "The pace of payments innovation is moving so quickly that the targeted 2023–2024 timeline [for Fed-Now] is lagging behind expectations," Baumann says.

#### WHO'S ASKING FOR IT?

(Percentage of institutions that say customers/members are asking for the product)



In a survey of more than 100 community banks and credit unions undertaken by Aite Group during the second quarter, 10% said they would wait for FedNow even though they had originally intended to move ahead with another service.

Twenty-four percent indicated they would add FedNow to rival services, while 35% said they did not intend to use FedNow. The remainder either didn't know what their plans were or gave another response. The Aite report was released last month.

"In recent market research I have done, financial institutions are moving forward with other real-time payment plans due to the extended timeline of FedNow," says Baumann, who co-authored the Aite report.

—John Stewart

### AS A DEADLINE NEARS, RELIEF FOR EMV AT THE PUMP

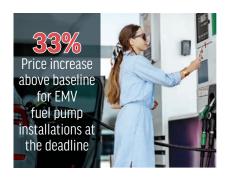
With gas stations and convenience stores feeling the economic pinch from a slowdown caused by the Covid-19 pandemic and uncertainty over the economy, Transaction Network Services Inc. has announced a new pricing structure to help cut station owners' telecom-network installation costs for EMV at the pump.

Transaction Networks Services (TNS) will defer monthly payments at the start of a multiyear contract for the installation of telecom systems that enable the point-of-sale system to communicate with inpump EMV card readers.

For example, a fuel retailer entering into a three-year contract with TNS may have payments deferred for the first three months of the contract. Merchants entering into a four-year contract may have payments deferred for the first four months.

Under card-network rules, gasstation owners have until April to become EMV-compliant. Non-compliant owners will have to assume liability for fraudulent transactions.

"The telecom network is just one piece of the puzzle to EMV upgrades and we are trying to incent fuel retailers to transition to EMV sooner, rather than closer to next April's deadline, by deferring



the cost of network installation for those willing to enter into longerterm contracts at a time when budgets are tight and profits are down," says Dan Lyman, head of payments markets, North America, for TNS.

Station owners upgrading to EMV at the pump typically need to have telecom-network solutions certified by their POS-system provider.

Station owners that wait to install EMV will see higher installation costs not just for the telecom network, but for all aspects of the EMV upgrade, because of a shortage of technicians to facilitate the installation, Lyman warns.

Citing research from Conexxus Inc., which develops technology standards for convenience stores and gas stations, TNS says overall network installation costs rise 14% six months prior to deadline compared to a baseline, 23% three

months before deadline, and 33% at the deadline, on average. Merchants that complete installation postdeadline will see a 31% increase.

"If there is a run on network installation leading up to the deadline, that will create a run on labor that will raise installation costs," Lyman, who adds the same economic principles apply to EMV installation overall. "We have one customer that has already deferred installation until profits are up again."

As part of its push to entice fuel retailers to convert to EMV at the pump sooner rather than later, TNS is educating merchants not just about the risks if they are not EMV-complaint at the deadline, but also the potential to leverage new fuel-dispenser technology to engage consumers at the pump in a way that can lead to more sales.

Television monitors at the pump, for example, can display ads that prompt consumers to purchase additional items in the stations' convenience store and that generate advertising revenue, Lyman adds.

"Converting to EMV is a significant expense," Lyman says. "But the liability that will come from avoiding that conversion is even greater."

-Peter Lucas

### AFTERPAY COMES TO THE CASH REGISTER

Just in time for the annual holiday spending binge, Afterpay Ltd. is making its previously online-only buy now, pay later service available to U.S. consumers in stores.

Australia-based Afterpay, fresh off a deal with mall developer Simon Property Group to support its service at physical retailers, announced the in-store service in October.

As with online purchases, Afterpay users make four equal payments using the payment card stored in their Afterpay account. Merchants, however, are immediately funded the full transaction amount minus Afterpay's fee, which typically ranges from 4% to 6%, says David Katz, Afterpay's chief product officer.

The in-store Afterpay uses a virtual card stored in the consumer's smart-phone wallet. It's available at Forever 21, Finish Lines, Levi's, Solstice Sunglasses, and select DSW stores, among others. Afterpay says

consumers who shop online and instore spend 15% to 20% more per transaction than ones who shop online only.

Consumers initiate a transaction by tapping the card icon in the Afterpay app, which activates the Afterpay card in the Apple Pay or Google Pay wallet. They then hold the phone near the contactlessenabled point-of-sale terminal to complete the transaction. Each purchase, whether online or instore, is split into four equal payments to be paid every two weeks. The average purchase price is \$150.

Afterpay takes on all the risk, Katz says. It uses a proprietary set of analytics to evaluate consumers, he says, and has a loss rate average of less than 1%. "Our ability to keep our losses very low is the secret sauce of Afterpay," Katz says. Afterpay performs no credit checks and does not report to the credit bureaus.



Katz: "We're taking on the risk."

Merchants like Afterpay because they avoid the risk of taking on installment payments and are immediately funded for purchases. Additionally, the service brings them new customers who typically make repeat purchases.

"There's something about this model that strikes people as a little bit magical," Katz says. "We're taking on the risk and bringing them a higher average over value and a higher conversion rate." Conversion rates may jump as much as 22% when a merchant deploys Afterpay, he says.

Afterpay, which started in 2014 in Australia, launched in the United States in 2018 just as the point-of-sale installment-lending business was heating up with entries from startups like Affirm Inc. and from the major card networks Visa Inc. and Mastercard Inc.

Despite the increasingly crowded market, Afterpay to date has 5 million active U.S. customers. Its in-store service launched in 2016 in Australia and New Zealand. Afterpay in-store requires no integration with the merchant's POS system since it uses existing mobile wallet rails to house the virtual card.

—Kevin Woodward

#### MONTHLY MERCHANT METRIC Growth in Same-Store Sales Year Over Year Annual volume change/growth of retained 5 58% 0.25% 5.15% 02 2020 July 20201 (non-attrited) accounts for Q2 2019 Q3 2019 Q4 2019 Q1 2020 -10.43% given period divided by total portfolio volume from same period of the prior year. Note: This is sourced from The Strawhecker Group's merchant data Payments Experts. Powerful Data. warehouse of over 3 million merchants in the U.S. market. The ability THE STRAWHECKER GROUP 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.

### PAYPAL, VENMO, AND QR CODES

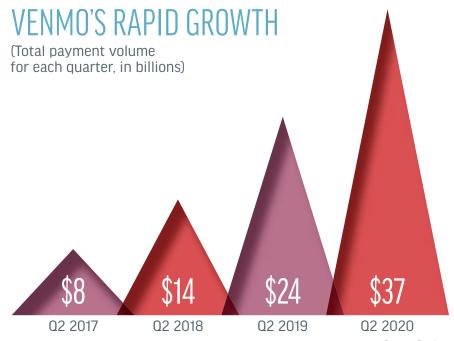
PayPal Holdings Inc. has launched a Visa-branded credit card for its Venmo peer-to-peer payment service that features a QR code for P2P transfers in addition to a nearfield communication chip for merchant acceptance. The new product arrives as PayPal searches for ways to boost revenue for its wildly popular P2P network, which allows users to make transfers for free.

The no-annual-fee card, issued by Stamford, Conn.-based Synchrony Financial, is not only the first issued on behalf of Venmo but may well be unique in featuring QR code capability in addition to NFC, according to experts reached by *Digital Transactions*.

The card arrives at a time when consumers are turning to contactless technology in stores to avoid possible Covid-19 infection. At the same time, mobile-wallet companies like PayPal are actively investigating QR codes as a way to allow users to make fast contactless payments with or without cards.

With its dual contactless technologies, the Venmo credit card is "clearly a 'future forward' idea and it positions PayPal well as an acceptance offering that can be used in any situation, physical or digital," says Thad Peterson, a senior analyst at Aite Group, a Boston-based consultancy.

PayPal says the card is available to all "eligible" Venmo users in the United States. The Venmo user base numbers some 60 million total, according to PayPal. The card will offer automatic cash back on "eligible" purchases and



Source: Statista

a "personalized" rewards program. Users can manage the card through the Venmo app.

The card's rewards allow users to earn up to 3% cash back each month on purchases made in their top spend category. The categories can change month-to-month as usage changes. Users can also split purchases within the Venmo app.

The new card comes as PayPal has embarked on an ambitious program to enable point-of-sale transactions via QR codes. In July, the company announced it would enable QR code payments at 8,200 CVS pharmacy stores in the United States in a venture with processor InComm. In all, PayPal has initiated QR code payment capability in some 28 countries.

Other payments companies, including Shift4 Payments Inc. and NMI, have also pushed QR technology in recent months either to

enable transactions or as a way to deliver a bill or other document that could trigger a payment ("The Sudden Ascent of QR Codes," October).

Incremental POS usage for Venmo via the new card would also help the service boost its revenue potential, if, as expected, Synchrony and PayPal will share interchange income on the Venmo card transactions. Neither company responded to queries regarding the matter, but PayPal executives have indicated over the years they were looking for ways to monetize the service's rapidly rising popularity.

In a July earnings call, the company indicated Venmo had racked up \$37 billion in volume in the second quarter (chart), up 52% year-over-year as users sought ways to move money to each other in the face of the pandemic.

—John Stewart

### security notes trends & tactics

### SHOULD YOU WORRY ABOUT QUANTUM?

LAST MONTH, The Wall Street Journal reported that Visa and JPMorgan Chase are gearing up to face the threat of quantum. Indeed, the drumbeat is getting louder. A new class of computing machines is coming down the pike, and much as present-day computers upended the payment industry, so will the new ones.

Richard Feynman, a primary physicist, a Noble Laureate, once asserted that "no one understands quantum." This includes payment professionals. Indeed, while all modern electronics is based on quantum physics, it is not clear how reality behaves in microcosm. We observe this behavior and express it with math, but we don't understand what we observe.

I have had some success laying the quantum story out to colleagues, so let me try it here. Present-day computers are based on electronic circuitry that generates the same output for a given input, time and again. That premise holds true in the visible world, but, as was discovered early in the last century, the smaller elements of reality react to the same stimulus the way dice reacts to tossing then. When you roll the dice on the table, you don't know what they will show. You only have probabilities. If the dice are "fair," then every outcome is associated with a probability of 1/6. Elements of the microcosm are characterized by the probability of an outcome when engaged.



In addition, we have another mystery called entanglement. If two spinning coins are entangled, then their collapse into heads or tails appears coordinated, even though they may be very far apart. Again, no explanation, only observation. This combination of probability outcome and entanglement allows us to construct computing circuitry that far exceeds what non-quantum machines can do.

Very well, so we compute faster. Why worry? It turns out that payment today is based on a silent assumption that computers are sufficiently slow to prevent them from breaking the security of money transfer. Once this assumption collapses—as will happen with the emergence of quantum computers then everything from small online purchases to large interbank wire transfers will no longer be secure. Unfortunately, cryptocurrencies will not save the day. They too hinge on this under-emphasized assumption that computers will remain not much faster than they are today.

The threat is real. Imagine that payment goes back to coins and banknotes only! So now the guestion is, how much time do we have to prepare for this calamity? Recent bold announcements by China, Google, IBM, and Microsoft suggest an imminent emergence of quantum machines. Moreover, powerful computers are national strategic assets, so most governments are feverishly—and silently—developing their own capabilities. They calm everyone with assurances that quantum is years ahead.

We at BitMint join a determined movement to use present-day computers to fend off the quantum assault. Our particular choice is to apply a "quantum vaccine" against the quantum attack. This "vaccine" is the new technology for quantumgrade randomness (see U.S. patent 10,467,522), which, if applied lavishly (patents 10,728,028 and 10,541,808), will defend digital payment against the most robust quantum attack. Preliminary deployment of our technology is very promising.

The flipside of the quantum threat is the quantum promise. Those probabilities of outcome I mentioned earlier are very delicate, which makes any "data touching" detectable. This is big. Digital data today can be stealthily compromised. But quantum-set data cannot be looked at without leaving fingerprints.

Quantum computers used for artificial intelligence will result in artificial personal CFOs—software in charge of our personal money management. Exciting times ahead!



### payments 3.0

### THE 2020 ELECTION AND PAYMENTS

AS OF MID-OCTOBER, Joe Biden is heavily favored to win the presidential election and the Democrats are likely to take control of both houses of Congress.

If the current trajectory plays out (let's pause for a moment and recognize that anything could happen), the payments world will find itself in a very different operating environment in 2021.

With Biden as president, the first major move to affect the payments industry will be a change in personnel at the regulators. The Supreme Court's decision in Seila Law LLC v. Consumer Financial Protection Bureau makes it possible for the president to remove the CFPB director at will. So the current director probably will be replaced quickly by someone who is more in line with what Sen. Elizabeth Warren had in mind when she created the agency-a regulator who will aggressively go after the industry for any and all infractions.

People rumored to be possible candidates for the position include Congresswoman Katie Porter of California, who was taught by Sen. Warren in law school; Rohit Chopra, a commissioner at the Federal Trade Commission; and Chris Brummer, Agnes N. Williams research professor and faculty director of Georgetown's Institute of International Economic Law.



Of course, a new director would bring in new staff, which could change the tone of the bureau and its interactions with the industry.

Elizabeth Warren has been suggested as a possible treasury secretary in a Biden Administration. But if the Democrats take control of the Senate by a narrow margin, they won't want to leave an empty Warren seat for Charlie Baker, the Republican governor of Massachusetts, to fill even on a temporary basis.

If the Democrats take both houses of Congress, we can expect big tech firms to face more scrutiny over their size and operations. The House Judiciary Committee's Antitrust Subcommittee released a report in early October taking big tech companies to task and calling for increased antitrust enforcement. Consider this in context of the introduction of the "Keep Big Tech Out Of Finance Act" introduced in the House last year.

A sufficiently aggressive Congress could force changes in the structure of big tech companies. Given that many conservatives feel that these companies have been unfair to those on the right, there may even be bipartisan support for bills that would break them up. Could this lead to a future where people could load Apple Pay onto Android devices? It's too soon to tell, but that would no longer be out of the realm of possibility if Congress forced such a break up.

The judicial system may be one countervailing force in all of this, given that the Trump administration has appointed more than 200 federal judges and multiple Supreme Court justices. The first case that could lead to big changes is one I have written about before, PavPal versus the CFPB.

While the case has attracted little notice, it is worth reiterating it could change the way payments are regulated. Courts are more likely to decide that a rule should be thrown out than they are to grant a narrow exception for one company. This means that if PayPal wins, the CFPB's prepaid rule may be thrown out entirely.

That could cause a great deal of regulatory uncertainty, both now and for future rules. In addition, if PayPal's arguments on the constitutionality of disclosures are accepted, that could lead to ripple effects throughout the industry.

Companies should begin planning now for a stricter environment and prepare to make the case to regulators that more is not always better when it comes to regulations.

## acquiring

### POISED FOR HUGE GROWTH-AND POTENTIAL TROUBLE

The rapidly rising payoff for acquirers from the state-by-state legalization of online sport betting comes with flashing caution signs.

**BY PETER LUCAS** 

**ONLINE SPORTS BETTING** has become a big business since the Supreme Court in 2018 opened the door for states to legalize it ("The Sporting Chance," July 2018). But now it's poised to undergo staggering growth.

Between June 2018 and mid-October of 2020, \$26.9 billion in legal sports bets have been wagered. About 90% of all sports bets placed in the United States are through digital channels, according to Eilers & Krejcik Gaming, a research and consulting firm that tracks sports betting regulation and revenue. That's significant volume that didn't exist a just few years ago.

In 2019, the first full year of legal sports betting in the United States,

gamblers wagered \$13 billion in the channel, double the amount in 2018, according to the American Gaming Association. Some 59% of the bets were placed outside of Nevada, with 70% made through online or mobile channels.

Currently, online sports betting is taking place in 18 states, with four more set to go live soon.

Nevertheless, processors aren't racing to cash in on this gold mine of new volume. One factor keeping some processors, especially small and mid-size ones, on the sidelines is a widespread concern that online sports betting is a highrisk market for fraud and moneylaundering schemes.

Legal barriers to entry are also formidable. Acquirers must jump through a hodge-podge of hoops to get certified. "Acquirers have to provide a lot of information about their business and ownership to receive approval to process online sports bets in each state," says Gerald Rau, managing director of electronic money movement for Eilers & Krejcik. "That precludes a lot of acquirers from entering the market."

Rau adds that it took more than a year for one top 10 acquirer his firm worked with to fully digest the steps needed to receive certification to process online sports bets.



#### STOPPING ABUSES

Another speed bump is the Covid-19 pandemic, which has upended the economy and dampened some acquirers' desire to enter the market.

"Pre-Covid, we were seeing more competition entering the market, but much of that competition has diminished due to the stress the pandemic has put on the acquiring industry, particularly on smaller processors," says George Connors, senior vice president, gaming and sports solutions, at Fiserv Inc. "Right now, sponsor banks and merchants are looking for an established provider that brings size, scale, and resiliency to the table."

likely looking closely at it," says Pucci, who adds e-commerce gateways are also interested. "Any acquirer or processor looking to get in this market, however, most likely doesn't want to talk about it too much because of the risks associated with the market."

Worries that criminals will use online sports-betting accounts for money laundering are rising fast. Account vending, or account brokering, is a money-laundering scheme that occurs when a bad actor sets up an account, uses it heavily to get VIP status or show a good transaction history, then sells the account to criminals so they can mask money movement, says

which are very useful for uncovering fraud rings, White adds.

Acquirers also need to be on the lookout for what White calls bonus abuse. In this scam, fraud rings look to exploit cash bonuses onlinebetting operators offer for setting up an account. Fraud rings set up hundreds of accounts and cashing out the bonuses, resulting in losses for the operator.

"Bonus abuse is one of the fastestgrowing fraud types we see, growing 72% in 2019 and 493% over the past three years," says White. "Bonus abuse is likely to be particularly problematic for sports-betting operators just launching in the U.S."

#### A MOBILE MARKET

Money laundering and fraud are not the only risks for acquirers. They also need to evaluate onlinegambling operators to ensure they are viable businesses. While large players such as London-based William Hill Sports, which was acquired in October by Caesars Entertainment for \$3.7 billion, have established track records as financially sound companies, a lot of smaller players entering the market don't.

Although it is a common practice in states that have sanctioned online sports to require the betting operator to have an affiliation with a casino before they can be licensed, the affiliation does not guarantee the operator has the financial reserves an acquirer wants to see.

"Acquirers we work with require the gambling operator to show a minimum of three consecutive months of six-figure volume before taking their business," says Jennifer Carrigan, who handles processing



#### 'Bonus abuse is one of the fastest-growing fraud types'

-ANGIE WHITE, SENIOR MANAGER, TRANS UNION

Fisery carved out its stake in online sports betting in 2019 with its \$22-billion acquisition of First Data Corp., which had been processing gaming transactions for years.

"A lot of large acquirers such as Fiserv and FIS have entered this market through acquisitions that bulked up their economies of scale," says Raymond Pucci., director for the merchant services practice at Mercator Advisory Group. "I expect legacy players in this market to keep riding this wave."

Several months after the Firserv-First Data deal, FIS Inc. acquired Worldpay Inc., a legacy player in the gaming business, for about \$35 billion.

"Online sports betting is a growth market, so acquirers are Angie White, a senior manager at Trans Union, the big credit bureau.

"This is a growing trend that we've been hearing about from [online-gambling] operators," White says. "There are a number of controls operators can put into place to stop these abuses, such as adding device-based authentication at login to allow operators to see whether an unauthorized device is attempting to access the account even if the log-in credentials are correct."

Another preventive measure is adding device risk intelligence when funds are deposited to open the gambling account. This allows the gambling operator to see if there are any suspicious velocities or account-to-device linkages, and sales at PayKings, a St. Petersburg, Fla.-based processor for highrisk merchants. "Acquirers want to be sure that the online gambling operator is vested in the business for the long haul."

Acquirers able to look past the risk associated with online sports betting will find that bets through mobile applications are skyrocketing. In New Jersey, for example, 89% of online bets were placed through mobile devices prior to the Covid-19 pandemic, says Rau.

Such a high percentage of bets placed by mobile devices is not a surprise to acquirers, considering how popular e-commerce has become.

"Across the e-commerce landscape in the U.S., mobile is the fastest-growing channel," Warren Tristram, president of

Worldpay Gaming Solutions at FIS. "When consumers want to shop, socialize, or pay, they are now reaching for the smart phone."

#### A SECURE MEDIUM

Indeed, some racetracks offer onsite betting through mobile devices, so gamblers don't have to place their bet at the parimutuel window before each race, according to David Mattei, a senior analyst for Aite Group. Bettors can download the app at the track and fund the account with cash at the parimutuel window or with a credit card.

In general, placing sports bets through mobile devices is a secure medium, because measures such as biometric controls help ensure that the device is not being used by a third party. Geo-location controls further enhance security by confirming the device is physically in the state where the bet is being placed, says Tristram. The latter is a capability states require of online sports-betting operators, Rau adds.

As more states legalize online sports betting, and those that have legalized it finally go live (such as North Carolina, Tennessee, Virginia, and Washington), the opportunities for acquirers to mine this new bonanza of volume are likely to become too attractive to resist.

"Gamblers in search of a touchless experience are shifting their dollars from casinos to digitalgaming platforms," says Fiserv's Connors. "As more states allow online gaming, an uptick in digital players can be expected."

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### strategies

# CONTACTLESS PAYMENTS: WE CAN DO BETTER

Yes, consumer usage has grown since Covid-19 set in, but a lack of coordination among industry players has led to confusion at the point of sale.

#### **BY SARAH GROTTA**

Sarah Grotta is director, debit and alternative payments practice, Mercator Advisory Group, Marlborough, Mass.

**CONTACTLESS** chip-enabled cards that allow consumers to simply wave their plastic in front of a similarly enabled merchant terminal to complete a purchase without needing to touch a point-of-sale terminal were tailor-made for the onset of the devastating coronavirus pandemic.

Their use has seen a marked increase as announced by the global card networks and processors, and they certainly have attracted much media attention.

The interest in contactless cards has been a focus as the number of new users of mobile wallets that also allow consumers to tap and pay for purchases in-store has plateaued. The global card networks have been championing contactless card use for years, and issuers and merchants have been slowly, methodically adopting the technology on their own timetable. Apart from some standout examples in transit fare collection use had been rather tepid.

Then along came Covid-19.

The most creative marketers in the world could not have developed a more convincing campaign to raise awareness of contactless technology. The virus has single-handedly prompted consumers to begin waving their cards at merchants' checkout rather than risk touching a POS terminal by dipping a card into a contact chip reader or even swiping their cards through the magnetic stripe reader.

But it has been difficult to pinpoint the actual growth of contactless card transactions or dollar volumes in the United States. Some of that I believe is purposeful.

Networks, processors, and other players are happy to share incredible year-over-year growth percentages for contactless card use, but less likely to share the actual numbers. This would reveal that use in 2019 was very low, likely in



the range of 1% to 2% of total card volumes. So even slight growth in transactions in 2020 would deliver some impressive percentages.

Also, some of the data about contactless use currently being broadcast is survey-based, and that can run into definitional issues that skew the adoption rate. Where payment experts may think of contactless as a chip on a card or a mobile device capable of transacting through near-field communication, consumers are thinking in terms of their own needs and simply recall contact-free checkout experiences.

This may include placing an order with a grocer on their computer for delivery or using mobile-order-and-pay with a local restaurant for carry out. When the consumer perspective is not considered, the adoption of contactless cards and universal wallets may be exaggerated.

#### ROOM FOR IMPROVEMENT

Certainly, the increased use of contactless cards is real. PSCU, the Florida-based credit union service organization, has released some of the most revealing data regarding transaction trends.

For the week ending Sept. 8, 2020, they found that 13.1% of debit card transactions and 9.8% of credit card transactions conducted on contactless-enabled cards were completed as a contactless tapand-go transaction. That is up from 8% for debit cards and 6.5% for credit cards when measured in mid-January 2020.

Survey data released by Mercator Advisory Group conducted after the outbreak of Covid-19 found that 35% of consumers were using a contactless chip card more or much more and 35% of mobile wallet users were using that payment form factor more or much more.

This survey also found that 12% of cardholders who had never used a contactless card were using it for the first time in reaction to the pandemic.

But before the payments industry collectively pats itself on the back for the recent growth in contactless transactions, I'd like to suggest that there is room for improvement. The rollout of contactless-capable cards that began long before the onset of Covid-19 has produced an uneven user experience for many consumers as conveyed by issuers and as experienced first-hand.

Sometimes it works as expected, providing a better user experience and faster checkout. Sometimes the cardholder cannot find the NFC reader on the terminal and begins circling the POS terminal with the card like a magician's

choreographed act before the trick is revealed. And sometimes the transaction simply fails, likely due to compatibility issues between the chip in the card and the generation of the technology in the terminal.

We also seem to have fumbled the opportunity for a contact-free checkout with the use of contactless cards and wallets, slowing down the purchase process and requiring interaction with the grimy terminal.

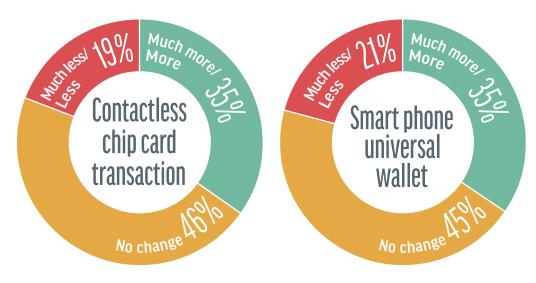
While the objective from a cardholder's point of view is to avoid catching a life-threatening disease through a payment terminal, many merchants are insisting that consumers touch the display panel or pick up the attached stylus to select a payment type, confirm their purchase amount, select receipt type, and maybe agree to round up the dollar amount to contribute to a charity.

With all of this activity demanding cardholder attention and response, the value of contactless to the



# USE OF NEW PAYMENT TECHNOLOGY AS A RESULT OF THE COVID-19 OUTBREAK

(Base = Those who used each technology before Covid-19)



Source: Mercator Advisory Group North American PaymentsInsights, 2020 U.S. Payments Survey

consumer—a quick and touch-free interaction—is lost.

This is reminiscent of the U.S. approach to the migration of EMV chip cards. Like contactless card technology, EMV technology had been around for years, and, outside of a few implementations, largely ignored. Then there was a major event. For contactless it has been the pandemic, but for EMV it was the major retailer data breaches.

The industry, in full-on reactionary mode, committed to the technology and rushed the implementation—and, as one of several unintended consequences, left the befuddled cardholder at the point of sale trying to figure out how to pay.

#### MINIMAL ADOPTION

Its seems that we are now stepping into that phase where issuers are rushing to move up their contactless card issuance, and merchants, at least those that are not fighting for mere survival, are scrambling to get terminals contactless-certified.

In both the EMV and contactless rollouts, it appears that shoppers' interests have not been the first consideration.

Prior to the pandemic, we also had a widespread lack of awareness on the part of both merchants and consumers about contactless. Issuers went to the expense of issuing cards with contactless capability, yet very little was done to market it.

At the same time, while networks were reporting ever greater issuance numbers, consumer and merchant surveys showed very little knowledge of the technology's existence—and, even worse, almost no understanding of its benefits.

The curiosity to try new technology for the sake of new technology is only going to achieve a minimal level of adoption.

The less altruistic reason for the investment in contactless card technology is the opportunity for issuers to convert cash transactions to interchange-generating activity. That rests on the assumption that the cash-to-contactless conversion experienced in other countries such as Australia and the United Kingdom will be duplicated in the U.S.

#### **GETTING IT RIGHT**

There is certainly a lot of opportunity. Though the use of cash to pay for things in stores is declining, cash is still the next most popular form of payment for inperson transactions after debit and credit cards.

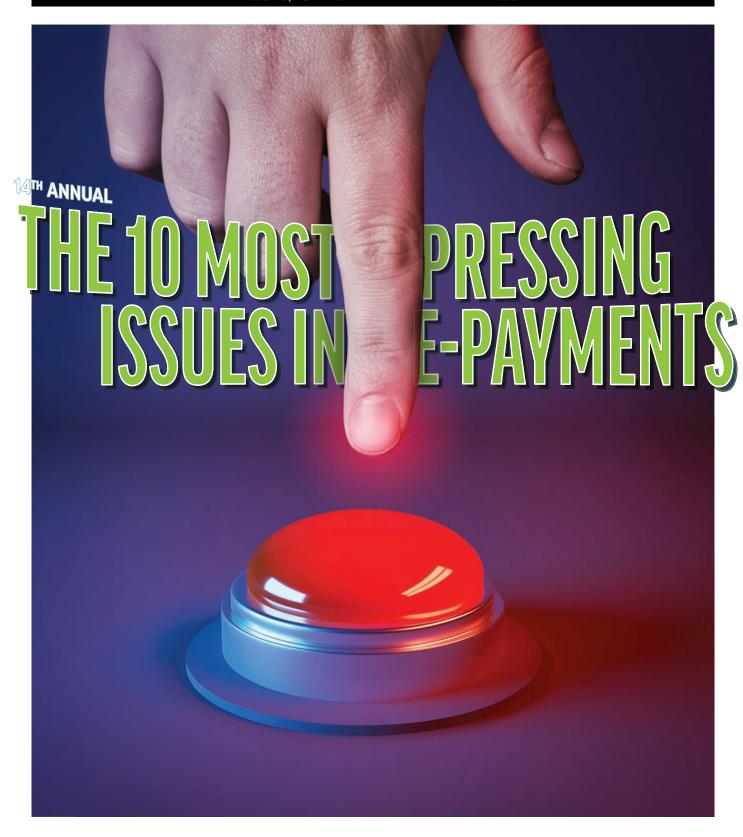
If we are ever going to get this right, there needs to be much better coordination. In a free market, there is choice, and choice can be messy and induce indecisiveness. The payments industry can still get this right and retain options by recognizing the needs, monetary and otherwise, of each participant in the payments value chain and align with all participants.

This doesn't mean mandates, but rather coordination between major players, and some ground rules on results. This includes benefits for the consumer, who recently seems to have been forgotten.



Each year, Digital Transactions uses this space to lay out the problems impacting the payments industry. This time, the Covid-19 pandemic has inflected our coverage across a wide range of issues. The solutions will have to be far from business as usual.

BY PETER LUCAS, JOHN STEWART AND KEVIN WOODWARD



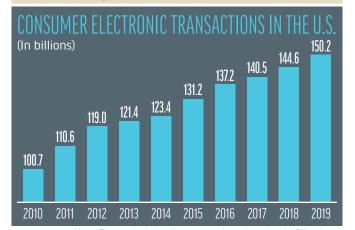
2020 HAS BEEN ONE OF THOSE YEARS you can some day tell your grandchildren about. A robust start, featuring a strong economy and plenty of optimism for a big year in payments, and then—WHAM! Lockdowns forced people to stay at home and derailed what had been an economic express train.

Even when the economy ultimately reopened, fear of infection conditioned everything consumers and merchants did regarding their interactions with each other. Payments providers struggled to accommodate both parties by stepping up efforts to support contactless payments and e-commerce.

The resulting boom in online sales and in technology for NFC and QR codes has reshaped much of the payments landscape, but it has also raised a host of uncertainties. In this year's annual catalog of the 10 most problematic payments topics—the 14th we've put together—we've found that questions and complications arising from Covid-19 have generated at least four of this year's issues, and perhaps indirectly influenced several others.

One other thing: Will consumers retain newly acquired habits when the pandemic finally lifts—or a vaccine is widely distributed—or will they fall back into old habits, leaving thousands of contactless devices untouched? What about all the added capacity to accommodate hordes of consumers who suddenly started shopping online for the first time? Will they go back to physical stores?

Nobody has the answers yet, least of all us. But at least we can provoke some thought on this and all the other sticky wickets on this year's list. One thing we can be sure of: Some very clever folks somewhere are figuring out how to tackle these matters. When they do, we'll be there to to tell you about it.



Note: Figures include all consumer-based card and ACH volume. Source: Digital Transactions estimates



#### 1. GAS STATIONS AREN'T GOING TO MAKE THE EMV DEADLINE

IN WHAT'S STARTING TO SOUND LIKE a broken record for the petroleum industry, 100% EMV compliance among station owners is unlikely at the April 2021 deadline, which has been extended twice since the original October 2017 cutoff date.

The high cost of installing EMV at the pump and shrinking profits due to consumers driving less during the Covid-19 pandemic has delivered a one-two punch that is prompting many station owners to delay installations.

That trend has kept high the percentage of stations not fully compliant. As of August, 47% of major petroleum merchants surveyed remained unprepared to meet the deadline, and 20% were still in the planning stages for rolling out EMV, according to ACI Worldwide. Of the stations not in compliance, one-third are unlikely to meet the deadline.

Compliance among convenience stores is no better. Overall, 39% of c-store owners will not be 100% compliant by April, says Conexxus Inc., which develops technology standards for convenience stores and gas stations,

Among c-store chains with 500 or more locations, 33.3% say they currently have no working EMV readers at the pump, while the remainder have installed EMV at less than 25% of their pumps, Conexxus says. Among chains with 51-to-200 locations, 46% have installed EMV readers at less than 25% of their pumps, and 23% have yet to install any.

Another factor slowing compliance is that demand for technicians to install EMV at the pump is outstripping supply.

What about after April? While petroleum-industry experts acknowledge that progress toward full compliance is being made, it remains painfully slow within some segments of the industry, making it unlikely it can be achieved in calendar year 2021.



### ONLINE IDENTITY REMAINS MAJOR CHALLENGE

The Cold War adage of "trust, but verify," could well be applied to authenticating consumers as they make transactions, especially online ones. With billions of pieces of stolen personally identifiable information available to criminals, it's easy enough for them to try to fool a merchant into thinking a legitimate customer is about to buy a new coffee pot or television.

Throw in more consumers—many of them new to e-commerce as first-time users stuck at home and shopping online—and the issue for merchants compounds. How do they verify online identities without falsely identifying a legitimate customer as potentially fraudulent?

Certainly, online-fraud issues have intensified in 2020, affected like so much else by the Covid-19 pandemic. As many states shuttered nonessential businesses and consumers shifted much of their spending to online stores, so, too, did criminals increase their misdeeds. Matters such as account takeovers and a better understanding of chargebacks surged to the forefront of merchant concerns, if they already weren't there.

Long a major issue for merchants and payments providers, account takeovers further cemented their position as the pandemic settled in place. "It's the numberone fraud trend we see," says Jeff Wixted, vice president of marketing and client solutions at Accertify Inc., an online-fraud specialist owned by American Express Co. "It's due to data breaches."

#### 3. SCREEN SCRAPING AND OPEN BANKING

FOR YEARS, FINTECHS HAVE ACCESSED consumers' bank accounts through a practice rather inelegantly known as screen scraping. With the consumer's permission, an app provider used the consumer's credentials to log into his account to make withdrawals, for example, to support a transfer to someone the consumer wanted to pay. Or the access might allow providers to verify the account or do risk decisioning.

It's called open banking, and it's gotten to be a big business, so much so that both Visa and Mastercard have agreed to acquire two of the cadre of companies that facilitate this access on behalf of any number of financial apps.

Screen scraping has been around for quite a while. But the data aggregators that control this access, along with any number of fintech apps and the financial institutions themselves, are less and less comfortable with it. They want to replace the practice with something far more secure and controllable—an application programming interface.

But if screen scraping is a "blunt instrument," as some call it, what will an API do-and how quickly can it be safely and broadly used? Those are questions the Financial Data Exchange, a Reston, Va.-based association whose members are working on the API, will have to answer. The group, made up of fintechs, aggregators, and financial institutions, is aiming at what it calls data minimization, precisely to reduce risk.

It's a race of sorts to develop and deploy the API fast enough and widely enough to head off the chance that, one of these days, one of those screen-scraping gambits could harvest a bonanza of consumer data that might be used in ways the owners of that data never really authorized.





#### 4. WILL CONTACTLESS FADE OR S

2020 WILL BE KNOWN AS THE YEAR that finally sparked consumer and merchant adoption of contactless payments. The worry, though, is whether this trend will fade when the pandemic does.

Born out of a concern to avoid touching point-of-sale terminals, this change in behavior has been long sought. In fact, issuers, card brands, and merchants have spent the past 15 years trying to get the three legs—consumers, merchants, and issuers-to line up to broadly adopt contactless payments. Now, it seems they have.

Card-based and smart phone-based contactless technology use is growing. This tech relies on a near-field communication chip to establish a two-way radio wave link between the card or phone and the POS terminal. A recent American Express Co. survey found that 81% of consumers intend to make contactless payments a permanent option at the point of sale.

Meanwhile, some 70% of merchants say their customers have asked for contactless payments, says J.J. Kieley, vice president of the AmEx Payments Consulting Group. And in a Visa Inc. survey, 54% of consumers would switch to a store that offers contactless payments.

But it's not just NFC that is advancing. Quick Response (QR) codes, long popular in many international markets, are being adopted by the likes of Square Inc. and Shift4 Payments Inc. for online ordering and payments. Even online stalwart PayPal Holdings Inc. is bringing QR code payments to more than 8,000 CVS stores.

No question different contactless technologies, driven in part by the pandemic, are gaining popularity. But a massive shift to new technology at the point of sale entails massive cost in hardware, software, and training. The question is, will consumers go back to old habits at the point of sale once infection fears subside? After all, swiping a card isn't all that complicated. All eyes will be on how consumers react once the pandemic subsides.

#### 5. ANOTHER ROUTING KERFUFFLE

YET ANOTHER ROUTING DISPUTE erupted this summer, this time over so-called PIN-less debit transactions. With e-commerce volume exploding as stay-at-home consumers shop online, some consumers are using a socalled PIN-less debit option, which allows them to use a debit card without having to enter a PIN. That makes for a faster transaction for users and an easier one for payments processors.

But a number of major debit card issuers, fearful of losing out on interchange revenue, are blocking these transactions by requiring users to enter a bank identification number, according to a letter this summer from Sen. Richard Durbin, who is famous—or infamous, depending on your point of view—for keeping an eye on routing and interchange matters.

In 2010, Durbin attached his eponymous amendment to the Dodd-Frank Act to cap debit-interchange revenue for big banks and require the availability of at least two unaffiliated networks for each transaction.

Durbin's July letter, addressed to Federal Reserve Chairman Jerome Powell, urges the Fed to consider actions that could correct the matter. It estimates merchants could save \$2 billion or more annually if PIN-less debit were widely available by allowing transactions to flow over the PIN-debit networks rather than through Visa and Mastercard. The estimate comes from research and consulting firm CMSPi.

Payments executives have learned not to underestimate Durbin. Many of them thought his amendment, at the time he proposed it, was radical and unlikely to become law. But it did, despite united opposition from Visa, Mastercard, and the big banks.

Now, they are dealing with another salvo from the Senator. They can only hope the result this time is more to their liking.





#### 6. THE CHARGEBACK WAVE ROLLS ON

CHARGEBACKS ARE ALWAYS A MAJOR ISSUE for retailers, and that intensified this year as online shopping became a necessity for many consumers. Those new to online shopping may have generated chargebacks because of their unfamiliarity with e-commerce and shipping practices. This has been especially challenging for the travel industry, which had to contend with canceled plane trips and hotel stays as in-person conferences were scrubbed and vacations were postponed.

The annual chargeback cost to U.S. issuers was \$585 million in 2019, and could grow to \$1.05 billion by 2023, said an Aite Group LLC report this summer. Aite pegs the cost of resolving a single chargeback at \$25.

Chargebacks will continue to demand attention because criminals will continue to use legitimate consumer data to make purchases. Some consumers, too, will commit so-called friendly fraud. Now, with Covid-19 lingering, chargeback filings will continue to grow. That's because more fraudsters view the card-not-present environment as the channel of least resistance and there are inconsistencies in technology and regulations in different markets, among others, notes Monica Eaton-Cardone, cofounder and chief operating officer of Chargebacks911.

One idea that might help: Putting more information on the cardholder's statement, such as detailed digital receipts, could help deflect some potential chargebacks, Aite says.

#### 7. MERCHANTS' CROSS-BORDER CHALLENGE

CROSS-BORDER TRANSACTIONS represent an enormous opportunity for processors. International e-commerce alone is forecast to represent 20% of online sales in 2022. In addition, opportunities for processors to facilitate cross-border payments exist in peer-to-peer payments and money transfers.

Processors looking to cash in on this high-growth market need to offer a platform that can convert currency and support payments popular with shoppers, including local payment options. Merchants unable to offer either of these facilities can lose sales.

Payment options favored by consumers for crossborder purchases include mobile wallets, credit and debit cards, bank transfers, and buy now, pay later offers. Also, experts say popular local payment options, such as AliPay or WeChat, should be offered as consumers expect them. Failing to offer the right mix of payment options can also cost merchants sales.

It's a challenge for most merchants. They're already struggling to suss out the advantages and drawbacks of a dizzying array of new payment methods and services.

Help could be on the way. PayPal and Visa took a step earlier this year to provide more tools to facilitate cross-border payments. Merchants can now accept these transactions through PayPal's Instant Transfer Service and Visa's Visa Direct push-payment platform.

The agreement will allow consumers and small businesses to send or receive money to a recipient's Visa card account in real time via PayPal, Venmo, or Xoom internationally. It will also enable PayPal to extend global whitelabel Visa Direct payout services through PayPal and its Braintree, Hyperwallet, and iZettle product solutions.

The deal will give both companies a leg up against fintechs such as TransferWise and Revolut, and allow them to compete with low-cost providers of cross border payments, such as The Clearinghouse RTP.

For processors to cash in on the connected global economy, they need to provide merchants and consumers with the tools and services they want and need to effectively manage and move their money.





#### 8. CONFUSION AT THE POINT OF SALE

TAP, SWIPE, OR WAVE? Tap, wave, or QR code? Card, watch, or phone? Never have consumers been confronted with so many ways to pay. Out of infection fears, only cash in some places may not be among the myriad options.

But how much confusion has this panoply of payment options sewn? It's likely few walk away from the transaction in utter befuddlement, but even momentary confusion can add precious seconds to a process many high-throughput checkouts have worked to make as sleek as possible.

It could be a temporary problem that will rectify itself as consumers get savvy to new ways to pay. No doubt credit cards were a mystery at one time to those accustomed to forking over-or accepting-folding money. But how long that will take is impossible to predict.

In the meantime, it might behoove merchants to beef up cashier training or keep someone on hand who can trouble-shoot at the front of the store on a moment's notice. That, of course, drives up costs at a time when merchants are already grumbling about the cost of card acceptance.

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### MANAGING THE IMPACT OF AN

WHEN THE COVID-19 PANDEMIC began shutting down the economy, it was clear this recession would be like no other. There were no metrics indicating an economic correction in the months leading up to the pandemic. Instead, Covid-19 instantly slammed the brakes on the economy, and hard, leaving businesses little if any time to prepare for the shock.

Once shelter-in-place orders were imposed, supply chains slowed to a crawl as manufacturers and businesses throttled back activity or temporarily shut down. With millions of workers furloughed, consumer spending fell off a cliff. Meanwhile, consumers' growing concerns about infection from interactions with cashiers and POS terminals and ATMs began changing how they transacted.

Payments providers responded by pushing technologies that make consumers feel safer at the point of sale. Restaurant POS and management-systems provider Toast Inc., for example, fast-tracked development of an app that allows consumers to pay at the table by scanning a QR code on the receipt with their phone, sparing them from handing over their card to wait staff or touching a portable POS terminal at the table.

Merchants are more receptive to installing or activating contactless card acceptance at the point-of-sale and consumers are relying more on peer-to-peer payments for such transactions as paying rent. Cardless ATMs, which allow consumers to stage a withdrawal on a smart phone, then complete it at the ATM by linking their phone to the machine via near-field communication or a QR code, have also gained traction.

The question is, with the country bracing for a resurgence of the coronavirus during the fall and winter, will such innovations give merchants the tools to adapt to consumers' changing payment preferences and help them weather the economic storm?

#### 10. THE IMPACT OF DRIVING OUT CASH

IS CASH THE NEW ENEMY? You would think so by reading some of the reports about the pandemic that refer to fears concerning how long the novel coronavirus can live on bank notes.

Entrepreneurs have been quick to act on this new squeamishness. This fall, a firm in Toronto called XTM Inc. introduced a so-called reverse ATM that takes in cash rather than dispensing it. In return, the user gets a prepaid Mastercard loaded with the value of the inserted cash.

Sensing trouble, the ATM industry has been monitoring the issue closely. Last month, its leading trade group, ATMIA, issued a statement deploring what it called "fearmongering" in the press about a scientific study regarding how long the virus can survive on a variety of surfaces, including paper and polymer banknotes. The association pointed out that the samples in the study were not exposed to light, while the virus is said to wither quickly when so exposed.

ATMIA has a point. For all the advances in making digital payments easier and faster (though sometimes more confusing at the point of sale—see issue number 8), cash remains a widely used and favored payment medium. Merchants, banks, and payments providers may well live to regret moves to discourage cash. Better to let the best payment method win on the merits. O



### strategies

# SUBSCRIPTIONS, ONLINE SERVICES, PAYPAL, AND COVID-19

The pandemic is changing payments, but it's also reworking payments strategies. Here's how the industry will have to react in the next few years.

TRANSFORMED daily life in many ways all too familiar by this point. While we know that the pandemic will end, the timing is uncertain, and some changes will be permanent.

**COVID-19 HAS DRAMATICALLY** 

I will focus here on two of these changes: the shift to contactless payments and the growth of digital wallets.

#### CONTACTLESS WILL STICK

Public health authorities have advised everyone to minimize physical contact, and early on people began reducing their use of cash to the extent that there was a nationwide coin shortage this summer. (The shortage was worsened by supply-chain disruptions).

Major retail chains actively encouraged customers to use cards. Even cards, however, posed a risk when inserted in point-of-sale systems. Guidelines from the Centers for Disease Control (as of Sept. 11, 2020) urged consumers to "[i]f possible, use touchless payment (pay without touching money, a card, or a keypad). If you must handle money, a card, or use a keypad, use hand sanitizer right after paying."

This accelerated what had been a sluggish move to contactless payments (QR code as well as NFC). American Express Co. found in a recent survey that 81% of merchants intend to make contactless a permanent payment method. Square Inc. is pushing QR codes for eateries. Also, PayPal Holdings Inc. has issued a Visa-branded Venmo card with built-in QR code as well as near-field communication capability.

NFC is a technology that allows communication between two microchips, at least one of which must be powered, over very short ranges. These chips can be embedded in plastic cards or posters, and the powered ones are found in mobile phones and payment terminals.

#### BY AARON MCPHERSON

Aaron McPherson is founder of AFM Consulting LLC. Reach him at amcpherson@payments-101.com.



Contrast the current status of contactless with the situation almost a year ago, when Jordan McKee wrote for Forbes that "it's still early for contactless cards in the US," citing lots of commitments and support from major players but little in the way of action.

Personally, as someone who uses Apple Pay, I can testify that, before the pandemic, it was common to encounter merchants that technically could accept NFC but had not activated it. All too often. an attempt to tap would be met with confusion from the clerk, who would mumble something like "oh, that's not working right now." Now, NFC is common anywhere, and local businesses that were cashonly have changed their tune.

Habits, once formed, are hard to break, and we are forming a tap-and-go habit right now. Most important, merchant support is much better, so consumers are more comfortable using contactless technology.

#### **ENERGIZED WALLETS**

Universal wallets like Apple Pay, Samsung Pay, and Google Pay that function via NFC have gotten a major shot in the arm by the increase in support for contactless payments from merchants responding to safety concerns. However, the use of digital wallets is also increasing as people shift from in-person to online events.

Trade shows and conventions in physical locations are temporarily impossible in the U.S., with events through next year being moved online or canceled altogether. The same is true of concerts, tours, and festivals. Many restaurants are likely to fail.

By contrast, subscription streaming, delivery, and gaming services are seeing an increase in usage as people seek entertainment and food in the safety of their homes.

Some of this will endure, not only because habits have formed, but because the technology of presenting performances over the Internet is improving. From primitive Zoom calls to the sophisticated multi-framed, edited performances that were done for the political conventions and for the Global Citizen fundraiser in May, the technology has evolved to the point that I expect in-person events will become less common.

Right now, most of these events are being released for free, but this is obviously not sustainable. That creates a new opportunity for paid streaming and purchased video, which will be done through payment cards and digital wallets.

There is a general shift from the point of sale to e-commerce that will also endure as consumers become more comfortable with shopping online. In terms of payments, this will increase the importance of digital-wallet placement and deals with wallet providers to improve positioning. Apple has already started to do this by giving extra rewards for certain merchants, and this is likely to grow.

### PAYPAL IS UNIVERSALLY ACCEPTED FOR COMMON STREAMING AND SUBSCRIPTION SERVICES

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CIET

SUBSCRIPTION SERVICE	CARD	PAYPAL	ACCT.	CARD	OTHER	INCENTIVES
Netflix	<b>O</b>	<b>Ø</b>				None
DC Universe	<b>O</b>	<b>Ø</b>				None
Marvel Unlimited	•	<b>©</b>				Marvel Mastercard gives 3% cash back on Marvel.com
Hulu	•	<b>©</b>				None
YouTube Premium, TV	•	•	•		Google Pay	None
Apple TV+, Music, News, Arcade	<b>O</b>	<b>Ø</b>		•	Apple Card	3% on Apple Card
Xbox Game Pass	<b>O</b>	<b>©</b>	•	<b>O</b>	Mobile phone	None
Playstation Now	•	<b>©</b>		<b>O</b>		None

Source: AFM Consulting

Subscriptions also have appeal in a time of economic crisis, when consumers place value on predictable costs and lack the funds for large individual purchases, preferring to spread out payments.

#### A MISSED OPPORTUNITY

When we look at some of the major streaming services (chart, page 28), one thing becomes apparent: Pay-Pal is universally accepted, in addition to payment cards.

This is a striking result, because PayPal is itself a universal wallet, capable of storing cards and bank accounts and able to support instant funding (for a fee).

Although Visa and Mastercard have combined forces under their Click to Pay branding, they have



While we know that the pandemic will end, the timing is uncertain, and some changes will be permanent. —McPherson

had more success with their realtime disbursement platforms, Mastercard Send and Visa Direct. Direct storage of card numbers (in tokenized form) is still the most popular method, but PayPal is becoming a universal default.

However, I found few store cards or incentives to use one form of payment over another. While Apple Card does have some merchant deals (for example, Panera), most of those are for one-time purchases, not subscriptions. This seems to be a missed opportunity.

As card issuers fight for pride of place in the PayPal wallet, they will

need to provide some incentives, like those in the direct merchant realm.

American Express, Chase, Citi, and Discover do integrate with PayPal to allow cardholders to use their proprietary cash-back rewards in the PayPal wallet, but more issuers will need to do this. If I am right, and there is a permanent shift away from in-person events to online entertainment and services, this will become the next fight for market share.

Therefore, even after it has been eradicated, Covid-19 will still have a long-lasting effect on payment-industry competition.



# endpoint

## THE REAL DEAL FOR REAL-TIME

Multiple real-time services may flourish, but don't discount the Fed's ability to corner volume.

#### BY ERIC GROVER

Eric Grover is principal at Intrepid Ventures, a Minden Nev-hased consultancy

**OVER THE LAST** several decades, there has been a crescendo of interest from regulators and the industry worldwide in real-time interbank payments. Instant interbank payments displace batch automated clearing house transfers and enable new use cases, improving economic efficiency and enriching society writ large.

While the United States wasn't an early adopter, its real-time interbank-payments market is developing apace. The Clearing House Payments Co. LLC (TCH), owned by many of the nation's biggest banks, launched its real-time payments system, RTP, in 2017.

In reaction, the Federal Reserve contends that, since there's only one private-sector instant-payments operator, it's imperative the Fed itself provide competition and system resiliency, as it does with ACH. The Fed has disingenuously argued that, because other instant-payment systems don't provide interbank real-time gross settlement, they weren't TCH competitors. If markets are defined narrowly enough you can always conjure a monopoly.

The Fed's plan is to have its Fed-Now real-time payments network live by 2023 or 2024.

Meanwhile, bank cooperative Early Warning Systems' instant account-to-accountpayments network, Zelle, went live in 2017. And, leveraging their "card" rails, Visa, Mastercard, Discover, Fiserv, and FIS provide instant interbank credit-push payments. Visa's and Mastercard's products, Visa Direct and Mastercard Send, reach billions of demand-deposit accounts planetwide.

The field will broaden further with nontraditional competitors.

For example, Chase's and Signature Bank's dollar-backed stable-coins, JPMCoin and Signet, enable faster payments between their institutional clients. Their systems could be opened up to other banks.

Facebook's Libra will support the real-time exchange of tokens representing dollars. And, when the Fed introduces a digital dollar—ideally distributed through rather than competing with banks—it will be another instant-payment system.

In the meantime, TCH's RTP is building network critical mass. It has relationships reaching 70% of U.S. DDAs, though not all are yet switched on. While many community banks distrust TCH, they can ill afford to wait on FedNow. That would deny their customers services and cost them deposits and customers.

TCH priced RTP to win over small banks. Banks pay 4.5 cents per realtime credit, a penny per request-forpayment, a penny per remittance

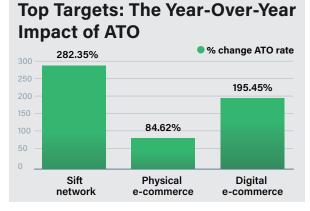
### DIGITAL TRUST & SAFETY INDEX: ACCOUNT TAKEOVER FRAUD AND THE GROWING BURDEN ON BUSINESS

Account takeover fraud has been a challenge for e-commerce merchants since business online. But recent years have proven exactly how pervasive ATO is across every industry, and revealed that it's the average fraudster's weapon of choice. Between the second quarter of 2019 and Q2 2020, overall ATO rates (the percentage of total logins that were stopped because they were fraudulent) surged by 282% across the entire Sift global network of merchants.

Digital and physical e-commerce were hit especially hard compared to other verticals. Combined with 2020's heavily disrupted economy, this massive spike has put risk teams in a difficult position. Predictions are no longer reliable; patterns are unpredictable. And this year, trust and safety experts are without the fraud-fighting tools and data they usually depend on.

#### THE CREEPING COST OF ACCOUNT TAKEOVER

A more urgent issue for merchants is the growing evidence that account takeover fraud can capsize businesses from the outside in, causing lasting damage that goes well beyond a fraudster's immediate control. Consumers reported that, if an account they owned were hacked, almost one-third of respondents said they'd stop using the impacted site or service and turn to a direct competitor.

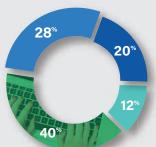


Losing 28% of one-time customers is a huge problem on its own. But if businesses consider the average customer's lifetime value (LTV), or how customer acquisition costs (CAC) are impacted by brand abandonment, the consequences of account takeover get exponentially bigger—and even the most accurate data doesn't account for the consequences of negative reviews and a company reputation blighted by fraud.

The latest industry report from Sift, *Digital Trust* & *Safety Index: Account Takeover Fraud and the Growing Burden on Business*, explores the story behind these findings. With insights derived from Sift's global merchant network of over 34,000 sites and apps across e-commerce, in addition to a survey of 1,000+

consumers, this newly-released report gives online merchants an understanding of why, how, and when ATO can cause significant disruption to a business. From user expectations around data security to account takeover's impact on buying behavior, this report digs into how fraudsters exploit security loopholes, which verticals are under attack from opportunistic fraudsters, and how trust and safety experts can effectively stop account takeover fraud in pandemic-era e-commerce.

#### The Hidden Cost of ATO: Churn and Chargebacks



- Keep using the site/service, but change credentials/personal info: 40%
- Stop using the site or service and select another provider: 28%
- Keep using the site/service, and contact support: 20%
- No change in behavior: 12%



Download the Digital Trust & Safety Index here: https://resources.sift.com/ebook/digital-trust-safetyindex-account-takeover-fraud-burden-business/



advice, and a dime in bill-payer interchange per credit, regardless of volume. TCH had hoped to weaken the Fed's case that only the beneficent Fed could provide equitable access to community banks.

Thereby, TCH hoped to dissuade the Fed from entering the market. It was a good try that was never going to work.

#### COMPETITOR NONPAREIL

The Fed's actions should be viewed through the lens of Nobel-Prize-winning economist James Buchanan's Public Choice Theory, which holds that public actors act to maximize their own utility. Since its 1913 founding, the Fed has relentlessly amassed more power and increased the scope of its activities.

FedNow will be the first new Fed payment system in four decades. One hundred Fed employees are beavering away.

Initially, FedNow will support credit-push payments, request-forpayment, and liquidity management for banks' instant-payment programs. Additional features such as an alias directory will be added later.

But by 2023, TCH's RTP will be a mature, feature-rich system, and,

855-767-0685

directly and through third-party processors, it will likely reach 99% of U.S. DDAs. Use of the card networks' and Zelle's instant payments will be greater. Digital dollars may be in the mix.

By contrast, FedNow at launch will reach relatively few DDAs.

For a would-be private-sector competitor, the market would be sewn up, unless it had a compellingly better mousetrap. The Fed, however, is a competitor nonpareil. It's the central bank, the paramount financial-system regulator, and enjoys unlimited resources.

The central bank will muscle its way into the market.

How? Pricing. Mastercard and Visa price higher than TCH and target different use cases, for now. The Fed has a different approach in mind.

To win volume, FedNow will be priced below cost for more than a decade. No private-sector enterprise could do this. Moreover, when foreign companies price exports to the U.S. below cost, it's called dumping.

The Fed says FedNow "fees will be based on transaction costs associated with mature volume estimates." In 2018, the United States had 28.5 billion ACH payments, which, on the current growth trajectory,

would be 38 billion in 2023. For instant and batch payments, the marginal processing cost is zero.

The Fed could decide the market won't be mature until real-time substantially supplants batch interbank payments and FedNow processes 20 billion payments annually.

#### BENDING THE KNEE

Even aggressively priced, however, FedNow won't interest banks if it doesn't reach a critical mass of DDAs.

The Fed pressed TCH to pledge to interoperability. Thus far, the bank cooperative has demurred. Why would it help a competitor become viable? However, the central bank won't take no for an answer. It will assert interoperability is necessary to ensure critical U.S. payments infrastructure is resilient. TCH banks could refuse such a demand from a private-sector competitor. But they will have to bend the knee for the Fed.

FedNow's liquidity-management tool will facilitate banks using RTP and/or FedNow, providing credit among themselves to maintain funds to cover real-time payments outside Fedwire's hours.

The market's global. TCH's RTP and FedNow at some point will interoperate with other national real-time payment platforms. Mastercard, with its worldwide network and Vocalink and Nets fasterpayments assets, is in the pole position to interconnect national real-time-payments platforms.

A patchwork of diverse, interoperating, and competing traditional and nontraditional domestic and cross-border systems augurs well for instant-payments value for banks, businesses, and consumers.

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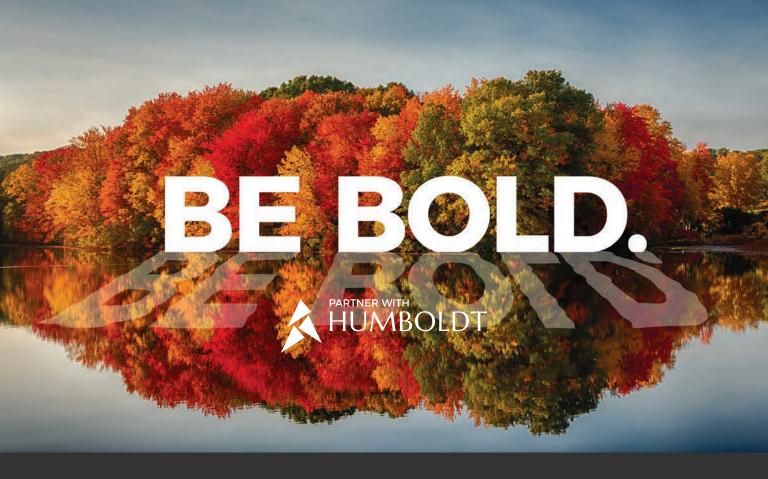
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