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Cover Illustration: Elizabeth Novak, 123rf.com



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## P2P GETS SOME RESPECT

**I DON'T KNOW** about you, but it seems to me peer-to-peer payments have broken through some sort of barrier. Just in the past few years, the concept of allowing individuals to pay each other via mobile apps has taken root and taken off. Apps like CashApp, PayPal, and Venmo have been enabling this for years, but then the nation's biggest banks crashed the party in 2017 with the launch of Zelle.

But if P2P has gained prominence, one issue remains: interoperability. And then there's a secondary issue: who should enable one network to talk to another, and how?

Interoperability is important because, for all the growth networks like Venmo and Zelle have enjoyed, it remains the case that you can't use Zelle to send a payment to a user of Venmo; it only works with other Zelle users. That's not a defect of Zelle. It's a feature of all the P2P systems.

Not surprisingly, the global card networks think they should be the ones solving this puzzle—and with their network reach and resources, they may be right. Indeed, Visa has already built a solution (see our story on page 9), though it won't be widely available until the middle of next year. It's called Visa+, and promises to let users who are signed up with one P2P service make a payment to another person who uses another network.

PayPal and Venmo will be the first two systems to participate in Visa+, with a test that starts later this year. That's a couple of formidable players to start with, but as some observers told us last month, it's not too much of a stretch, given that PayPal has owned Venmo since 2013. But Visa says it's signed more players to come onboard later, specifically DailyPay, i2c, TabaPay, and Western Union. So far, though, no mention of Block Inc.'s massive Cash App wallet or, for that matter, Zelle.

Visa will be the network, that is, the interoperability provider, so you won't need a Visa card to use Visa+. And while Visa says the service will move funds in real time, availability will depend on the banks involved in the transfer and the region they are in.

So a base of "millions" of persons in the U.S. market alone will be available through Visa+, Visa says. Exactly how many, though, it's not saying.

No doubt interoperability is likely to be a major selling point, so Visa is on to something here. But the absence of Cash App and Zelle is a big problem, as sources have told us. No doubt Visa is working on that. The utility of Visa+ may well depend on it.

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## WILL VISA'S 3% SURCHARGE CAP BOOST CASH DISCOUNTS?

On April 15, Visa Inc. lowered the amount a merchant can surcharge for transactions on its credit cards from a maximum of 4% to 3%, a move it had announced early this year.

Merchants that want to surcharge will have no option but to comply with the 3% cap, says Jeff Fortney, senior associate at TSG, an Omaha, Neb.-based payments-advisory firm. In Canada, the cap will be set at 2.4%, Fortney wrote in a March TSG blog post. Visa issued a bulletin in January about the reduction.

Surcharging on debit cards, even if processed as signature debit, is not permitted. Doing so is a violation

of the Durbin Amendment to the Dodd-Frank Act, which caps debit card costs, Fortney says.

The 3% cap may not cover a merchant's total cost of credit card acceptance, but it may get the merchant to pay more attention to transactions it does surcharge.

Some merchants, whether knowingly or not, assess a surcharge on all cards, even though a consumer may use a debit card. That will result in fines, which usually are passed down from the issuer to the acquirer to the independent sales organization to the merchant, Fortney says. Fines for violating the regulation are based

on each incident. Fines have been issued starting at \$30,000 per incident. Fines will also be assessed for surcharging more than 3%, he says.

A recent TSG survey of 530 small businesses found that 58% said they have a clear understanding of surcharging, while 30% said they had heard of it, but lacked a full understanding of the practice, and 12% did not know what it was.

The impact on merchants will depend on automatic updates from their provider, says Jonathan Razi, chief product officer at Stax, an Orlando, Fla.-based payments provider. Razi had been chief executive of CardX, a Chicago-based surcharging platform that Stax acquired in 2021. Merchants can surcharge on point-of-sale and e-commerce transactions.

Merchants using a “do-it-yourself,” a cash discount, or non-cash adjustment, also must comply, Razi says, because they add a fee at the point of sale above the list price.

“I have personally seen a significant increase in enforcement actions against products like these, with fines, starting at \$5,000, and expect many of these merchants will be caught offside—and urgently need to get



The cap on the extra amount merchants can charge on Visa transactions dropped last month to 3% from 4%.



compliant—once the new Visa rule goes into effect,” Razi says by email to *Digital Transactions*. All states but Massachusetts and Connecticut allow surcharging.

“Visa’s move from 4% to a 3% surcharge limit will encourage more merchants to move to a true cash discount or other programs [from] surcharge offerings on purchases. Outside of that, it shouldn’t have too big of an impact on the economy at large,” says Ben Ross, chief operating officer of Green Payments, a Long Branch, N.J.-based payments provider.

The cap reduction could make some merchants reconsider their surcharging plans, he says. “This is going to be a definite shift for companies that rely on this method.

Businesses will most likely look into creative services like cash discounts or dual pricing offerings over a typical surcharge model,” Ross says by email.

Some acquirers are challenged by the rate reduction, Razi says. “I observed a large acquirer officially communicate that this change applied to ‘[n]ew merchants only,’ and that ‘[c]urrent merchants will still be able to charge 4%’—which is totally erroneous, as this rule applies to all merchants,” Razi says.

“There is a lot of industry confusion, which is understandable in a space where regulation changes frequently,” he adds. “However, it drives home the importance of making sure you are selecting a partner that has real expertise.”

Along with technical changes to point-of-sale software, merchants also will need to update signage that discloses the surcharging policy.

“This would include replacing print signage in their store locations, updating the invoices they send to customers, and revising webpages that reference the surcharge rate (as just a few examples),” Razi says. “When it comes to online checkout, many merchants use a payment page that is hosted by their technology partner—in which case the technology partner will update the disclosure on that page.”

He also suggests that the surcharge amount be transmitted in the authorization and clearing message when the transaction is

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processed, a move that helps the card brands review surcharge amounts for each transaction.

Having fought for a decade for clearance to surcharge credit card transactions, merchants aren't likely to step away from the practice, even though the cap will be lower.

Credit card surcharging's origins lie in litigation merchants brought against the major card brands over their interchange rates. Surcharging was first allowed in

2013 following a 2012 settlement on credit card interchange. At that time, a plaintiff in the litigation, along with the National Retail Federation, suggested no merchants intended to add surcharges to their credit card transactions.

That's not the case today. "We have seen surcharging demand accelerate not only every quarter, but literally every week, with no signs of slowing," Razi says.

"I believe there are three main

reasons this trend is going strong," he adds. "First, merchant-processing fees continue to rise, so the pain is increasing. Second, traditional merchant services have been commoditized through price competition, meaning acquirers want to sell differentiated technology solutions. And, third, the market opportunity for surcharging is growing, thanks to a larger number of states that permit surcharging."

—Kevin Woodward

## CAPITAL ONE WILL WEATHER A LOSS OF THE WALMART CARD PORTFOLIO

Even if Walmart Inc. is successful in terminating its contact with Capital One Financial Corp. to issue private-label and co-branded cards on the retail behemoth's behalf, the loss is not likely to have a major impact on Capital One's business, says a research note from Keefe, Bruyette & Woods.

The reason, the New York-based investment banking firm says, is that Walmart's card program accounted for just 3% of earnings in 2022, the loss of which can be "easily offsettable by paring back on areas such as marketing and other expenses in a worst-case scenario."

Walmart sued Capital One last month, claiming the card issuer failed to meet several service-level agreements (SLAs) at least five times over a rolling 12 calendar-month period. That triggered a clause in the contract that gives Walmart the right to terminate the deal, according to the complaint.

The notice of termination must be delivered to Capital One within 90 days after Walmart learns of the fifth SLA failure, the complaint says. Capital One has been issuing cards on Walmart's behalf since 2019.

In a statement emailed to *Digital Transactions*, Walmart says it is dropping Capital One as a result of the SLA failures, which Capital One acknowledged to the retail giant in writing, according to the complaint. "The SLAs are thus essential to preserving the quality customer service at the core of Walmart's brand," the complaint says.

Performance metrics within the SLAs include timeliness of transaction posting and replacing a card within five business days. Some 97% of conforming payments must be posted within one business day of receipt, according to the SLAs, while 99% of non-conforming payments must be posted within five business days of

receipt. Some 99.9% of electronic conforming payments must be posted by the next business day.

Despite the allegations in the complaint, Keefe, Bruyette & Woods contends Walmart's decision to terminate its deal with Capital One is really part of a strategy to negotiate a more favorable contract.

"Our understanding is that [Capital One Financial] has a solid economic deal and Walmart wants better terms (i.e., asking for a renegotiation multiple times), particularly as the macroeconomic backdrop weakens... These actions are standard Walmart operating procedures when it wants a better deal, and clearly [Capital One] is not willing to concede to the merchant's wishes," the research note says.

Capital One echoes that sentiment. "Walmart's lawsuit is an attempt to renegotiate the economic terms of the partnership it agreed to just a

few years ago, or end the deal early,” the card issuer says in a statement emailed to *Digital Transactions*.

“These servicing issues were immaterial and cured by Capital One pursuant to the terms of the agreement, without harm to customers, the program, or Walmart. Capital One disputes that Walmart has any right to change the terms of the existing partnership mid-stream, and we will vigorously protect our contractual rights in court,” Capital One’s statement continues.

Keefe, Bruyette & Woods notes that Walmart used a similar tactic with Synchrony Financial, which administered the big-box retailer’s credit card program prior to Capital One.

Walmart’s contract with Capital One reportedly runs through 2026, but 2025 would be the earliest year in which the bank would feel a financial impact from the loss of the portfolio if Walmart’s lawsuit is successful, according to the research note.

At the end of 2022, Walmart’s card portfolio totaled \$8.3 billion in receivables, or about 6% of Capital One’s domestic card portfolio, and generated \$214 million in after tax net income.

“Capital One has developed a leading credit card product for Walmart and its customers and is proud of the value that we’ve delivered to both,” the card issuer says.

—Peter Lucas

# VISA'S P2P INTEROPERABILITY PLAY

The payments industry continues to reckon with the myriad ways the pandemic has permanently reshaped how people pay businesses and other people. One key example is how individuals are paying each other compared to just a couple of years ago, and how payment networks are responding.

In just the two years from 2019 to 2021, for example, the share of peer-to-peer payments using cash dropped dramatically, from 61% of payments to 49%, according to data posted by the

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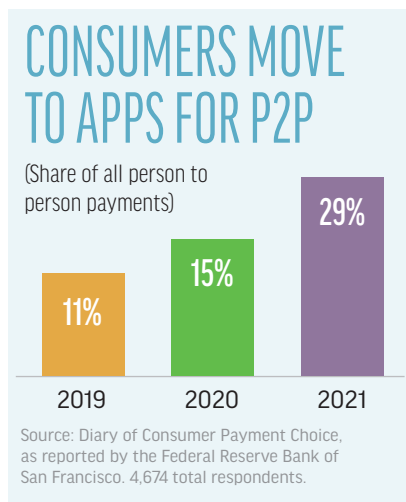
San Francisco Federal Reserve Bank (chart). Checks fell to 9% from 12%. But the share for mobile apps soared from 11% of P2P payments to 29%.

That factor has created both an opportunity and a problem for P2P apps like PayPal, Venmo, and Zelle, and even for traditional remittance networks like Western Union: Consumers are warming up fast to digital P2P, but the share of other people and organizations they can pay, or receive payments from, remains limited to those each network can reach.

That forces at least some users to load multiple P2P wallets. “They may have their favorite, but they have multiple apps to serve other users,” says payments-industry expert Sarah Grotta.

Last month, Visa Inc. launched what it bills as a solution to that issue, though it won’t be widely available until the middle of next year. The new service, dubbed Visa+, promises to let users signed up with one P2P service make a payment to another person using another network.

The launch partners include PayPal and Venmo, a PayPal-owned service, which will test Visa+ starting later this



year, Visa says. Networks signed to come onboard later include DailyPay, i2c, TabaPay, and Western Union. Interoperability will be facilitated by the Visa network serving as what the payments giant calls a “bridge” for P2P payments.

Visa+ doesn’t require users to have a Visa card. Instead, it works with what the network calls a “payname,” which users set up in the app they like to use. They can then share their payname with anyone they need or want to pay or want to receive payments from, using the payment app linked to that payname. Although

Visa bills the service as moving funds in real time, funds availability will depend on the banks involved in the transfer and the region they are in, Visa cautions.

The company clearly sees Visa+ moving well beyond birthday money sent from grandma to grandchildren. It envisions payouts to gig workers, such as ride-share drivers, and to marketplaces.

Interoperability is likely to be a major selling point, given that 84% of consumers say they have used a P2P service, according to a LendingTree survey of nearly 1,000 consumers in May last year. PayPal was the most commonly used app, at 84% of respondents, followed by Venmo (49%). But the third- and fourth-ranked services, Block Inc.’s Cash App (44%) and Zelle (33%), are not among the initial participating Visa+ networks. That creates a big gap, Grotta observes. “Cash App would have to be a big target” for Visa, she says.

Other observers also have reservations. “I’m underwhelmed,” says Patricia Hewitt, head of PG Research & Advisory Services, a payments consultancy, who agrees with Grotta that the absence of the big Zelle and Cash App services is a liability. “Visa and Mastercard have a muddled track record selling services through intermediaries,” Hewitt observes.

Another implication, according to Grotta, is that the range of apps users add is likely to shrink as they begin to adopt Visa+. The service is a “huge convenience,” she says, but could lead to a “battle of the P2P apps,” with developers scrambling to be the one consumers adopt. “The question,” she says, “is how many apps Visa can add.”

—John Stewart

## MONTHLY MERCHANT METRIC

### Release A: Total Gross Processing Revenue %

This is sourced from The Strawhecker Group’s merchant datawarehouse of over 4M merchants in the U.S. market. The ability to understand this data is important as SMB merchants and the payments providers that serve them are key drivers of the economy.

All data is for SMB Households defined as households with less than \$5M in annual card volume.

**Metric Definitions:** (Only use definitions related to an individual month’s release)

**Household** - Standalone Merchants are considered as a Household with one store and Chained outlets under a common ChainID are combined together and considered as one single Household.

**Total Gross Processing Revenue %** - Sum of total discount, total transaction fee revenue and total other fee revenue divided by total volume.

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Q4'21		2.645%
Q1'22		2.682%
Q2'22		2.732%
Q3'22		2.754%
Q4'22		2.764%
Feb'23 (T3M)		2.801%



# BANKS ARE CHANGING BEFORE OUR EYES

**SINCE THEIR INCEPTION**, banks have offered two categories of services: a place to put money, and a means to grow money. Banks thrived because there was no viable alternative to their offer to safeguard our cash holdings. It is still true today, but not for long.

Bankers I talk to about how BitMint money works react with a moment of shock: “Checking accounts will be a relic of the past!” Indeed, I state, money for living and business will be sitting on people’s phone, safe, secure, private. Cryptography and software beats vaults and hardware. But that is not Doomsday, I assure them. It just means that you will have to focus on your money-related services: identifying creditworthy borrowers and sharing the profit with your depositors.

It is really revolutionary. This little shiny device in the palm of your hand is where money stays, ready to be used. Bankers are indeed shocked to realize that they are no longer indispensable as the only option to safeguard cash and liquidity in large quantities. There will be no rationale for keeping it there. And the coming fast-payment technology will not help.

A good bank has the skills, the expertise, the know-how to identify creditworthy borrowers and lend them money payable at a profitable interest rate. Banks say to their

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depositors: “You give us your money, and we will use our expertise to lend it to solid borrowers who will not default, but rather pay it back with interest, and then you, the depositor, and we, the banks, will share this profit.” Sounds like a good deal. Only that today the banks use liquid short-term accounts to fund long-term loans, counting on the statistical premise that only a small fraction of these cashout-ready accounts is actually being cashed out at any moment.

This statistical expectation melts away when even a single bank somewhere far away is collapsing, threatening a chain reaction. To prevent one, we have the FDIC, which is too little too late.

The threat of systemic collapse is hinged completely on the imbalance between short-term deposits and long-term loans. But in the new banking reality, depositors will not use checking accounts or short-term saving accounts. They will use their phones for that handy money. Depositors will go to the bank to place their money to be tied up at long-term, promised interest, and

the bank will then safely loan that money to long-term borrowers and then share the profit with the depositors. Bingo! No need for an FDIC, and no fear of a run on the bank because the imbalance between short-term and long-term money disappears.

Banks will be making a living on their competence in spotting good borrowers, and they will compete with each other as in all other industries. Meanwhile, the public will store its liquid cash on their computing devices, trusting cryptography rather than the alertness of bank regulators.

It is simple, but bankers are so reluctant to face it. There are very few runs on banks throughout history, not because their business model is sound (the disparity between short-term deposits and long-term loans is an inherent risk), but because depositors do not have mattresses big enough to keep their money. Reluctant and fearful, they return to the banks to buy money-keeping services. Technology changes this.

Bitcoin rose to fame in the European financial crisis of 2010 when scared depositors desperately searched for a safe place to keep their liquidity. Alas, Bitcoin is “air-based,” and is vulnerable to quantum computers. So different solutions are needed, like BitMint. **DT**

# START THINKING ABOUT CONSUMER PROTECTION

**THE BATTLE OVER** the role—and even the existence—of the Consumer Financial Protection Bureau will heat up this fall, but the future of the Bureau, and of financial regulations, will hang in the balance for a few years.

The financial-services industry may applaud the recent pushback against the regulators, but this could leave the business in a realm of regulatory uncertainty that could hinder both regulation and business development.

In the “*Community Financial Services Association of America v. Consumer Financial Protection Bureau*” decision, the Fifth Circuit vacated the Bureau’s 2017 Payday Lending Rule because the Bureau’s funding method was unconstitutional. But the court said the Payday Lending Rule itself rests on solid legal grounds. The Supreme Court agreed in February to add the Bureau’s appeal of this decision to its docket for October 2023.

The Fifth Circuit decision suggests the Supreme Court is unlikely to simply dissolve the Bureau, and is instead more likely to address the question of the Bureau’s funding. If its decision changes the status quo, then the future of consumer protection, and of the Bureau, will be even less settled, since Congress would need to resolve the funding question.

The 2024 elections will determine the future shape of the Bureau, but



BY BEN  
JACKSON

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there is a catch. Given the divisive nature of politics, it is unlikely that any major change will come unless one party controls both houses of Congress and the presidency.

If the Republicans sweep the elections, they will require the Bureau to receive its money through the Congressional appropriations process and will change the structure of the Bureau from a single director to a board. From a political perspective, they do not want to be known as the party that voted against consumer protection.

If the Democrats win, they will probably keep the current single-director structure and be guided by whatever parameters the Supreme Court lays out in its funding decision. But you can bet any Democratic bill will make the Bureau’s funding as independent as possible.

In the case of a divided Congress, or a united Congress with a president from the opposite party, any meaningful bill will likely be obstructed by the opposition party or get lost in partisan fights around other priorities.

This is problematic because federal regulations are not the only consideration when it comes to

consumer protection. Various states could decide to try to fill perceived gaps, leading to a patchwork of regulations across the country.

Beyond that, good old-fashioned contract law can matter just as much as federal regs. As one industry lawyer once explained to me, an account agreement is essentially a contract with the customer. So even if regulations have changed or been vacated by the court, providers cannot arbitrarily stop providing protections that were in the account agreement when a product was issued to a customer.

This explains why, even though the final Prepaid Accounts rule went into effect roughly six years after it was first proposed, providers still needed to destroy a large amount of unsold cards, cardholder agreements, and marketing collateral that did not keep up with all the iterations and changes.

The industry sometimes argues it can regulate itself in conjunction with the market. It might find itself in that situation, at least for a brief time. Companies should begin thinking about what consumer-protection policies they have and how they will explain those policies to stakeholders, including customers, business partners, and even courts. And the industry might want to consider coming together on best practices around consumer protection to reduce reputational and legal risks— even if regulatory risks subside. DT



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# acquiring

## THE MATURATION OF POT PAYMENTS

Cannabis could be a huge opportunity for acquirers, but the wait for a ubiquitous PayPal-of-pot option continues.

BY PETER LUCAS

**WHEN IT COMES** to electronic payments, the legal cannabis industry is starting to grow up.

Cannabis was once considered the Wild West of the payment world because of all the skullduggery that took place to mislead processors about the type of transactions they were actually handling. Shenanigans still occur, but they are becoming less prevalent.

Fading in the rearview mirror, too, are the closed-loop prepaid systems and other workarounds, such as cashless ATMs, which were still highly popular as recently as last year.

Indeed, the card networks and terminal makers have been cracking down on the use of cashless ATMs in dispensaries. Both Visa Inc. and

Mastercard Inc. issued industrywide memos in the past couple of years warning that use of cashless ATMs by cannabis dispensaries violates their operating rules.

In December, terminal maker NCR Corp. went so far as to turn off services to cashless ATMs at dispensaries in Arizona, California, and Massachusetts.

Instead of new workarounds, payment providers are focusing on solutions that do not run afoul of federal banking laws.

Propelling this trend is consumers' growing desire to pay for dispensary purchases electronically, as opposed to using cash. At the same time, dispensary operators want electronic payment options they can bundle with loyalty, delivery, subscription, and e-commerce applications.

"Accessibility, choice, and convenience are all factors in the online-shopping experience, and by providing them, cannabis retailers will gain access to a wider customer base, and payments play a factor in each of them," says Robert Braun, head of partnerships for Aeropay, a Chicago-based fintech that services cannabis merchants.

"Together, the shift to e-commerce [and] home and curbside delivery, and cannabis being able to provide the same experience while maintaining compliance standards, has helped the industry move forward," Braun adds.



## INDEPENDENT NETWORKS

For payments providers, the move away from payment solutions that skirt card network rules and toward legitimate electronic payment options is a plus as states continue to push for legalization.

Currently, 21 states—plus the District of Columbia, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands—have legalized cannabis for recreational use. Use of cannabis for medical purposes is legal in 38 states.

To enable the acceptance of PIN debit cards at the point-of-sale, payment providers are developing solutions that run over independent debit networks, such as the Co-op Pay Network which was developed for credit unions. These independent debit networks, of which there are estimated to be about a dozen, were developed as lower-cost alternatives for merchants.

Providers developed PIN-debit solutions for cannabis merchants because they are typically used by credit unions and community banks, which have historically shown a willingness to bank cannabis merchants. Tapping this community of card issuers enables cannabis merchants to reach the majority of the PIN debit card holders in the United States.

One drawback to independent debit networks is that approval rates range between 70% and 95%, according to Paybotic LLC, a West Palm Beach, Fla.-based provider of payment solutions to cannabis merchants.

But average tickets can be higher, as is the case with card-based payments in other merchant segments. On average, consumers that use PIN debit cards to make a purchase at a cannabis merchant spend 20% to 30% more than they would if they could only

pay with cash, payment experts say.

“Cannabis merchants like that consumers spend more with cards,” says Robert Craig, chief executive for PayQwick, a Calabasas, Calif.-based provider of financial solutions to cannabis merchants. Last year, PayQwick entered an agreement to be acquired by Green Check Verified, a Bonita Springs, Fla.-based provider of financial solutions for the cannabis industry.

“The leap from a cashless ATM to a PIN-debit solution is not that big a hurdle, and there are several debit networks that see the potential for a lot of revenue and want a piece of this market,” Craig adds.

The benefit to consumers is they can make a purchase for the exact amount, instead of having to round up the purchase by \$10 or \$20, as is the case with cashless ATMs. With a cashless ATM, consumers can only initiate a transaction in predetermined increments, such as \$20, since the ATM is a cash dispenser, not a POS terminal.

Rather than dispense cash, cashless ATMs deposit the requested funds from the consumer’s checking account directly to the merchant’s account. The merchant then rings up the total of the sale and pays the customer any change due.

Yet another advantage of PIN debit solutions for consumers is they can avoid the out-of-network bank fees levied for cashless ATM transactions, observers say.

“Cashless ATMs are no longer a viable payment option for cannabis dispensaries due to the uncertainty surrounding their legality, high transaction fees (up to 15%), the difficulty of use, and security risks,” says James Li, technology partner lead for Onfleet Inc., a San Francisco-based delivery service which has partnered with

several cannabis payment providers.

But PIN debit solutions still have drawbacks. Even though banks issue PIN debit cards that can run over independent network rails, there are some—the national banks especially—that don’t want their debit cards being used for purchases in dispensaries and will take steps to prevent it, observers say.

“As the major banks learn that their consumers are purchasing cannabis with debit cards, they will have the ability to block the purchase,” says Paybotic chief executive Max Miller. “The banks can simply make a quick configuration change in their platforms, and any transactions from the secondary network using the merchant code for cannabis will be declined.”

In March, Paybotic announced the opening of a waitlist for its menu of financial services available to cannabis dispensaries. The services include FDIC-insured checking accounts, electronic payments, and mobile and online access. The West Palm Beach, Fla.-fintech partners with Regents Bank to provide financial services to cannabis dispensaries.

## THE ACH OPTION

An alternative to PIN debit is ACH-based solutions that move money directly from the consumer’s account to the merchant’s account, using the automated clearing house. These solutions have begun to flourish as consumers’ preference for shopping online has increased substantially since the onset of the Covid-19 pandemic.

With an ACH transaction, consumers can pay for an order placed online and have it delivered to their home or curbside. ACH solutions also complement subscription services.



Aeripay, for example, late last year partnered with HighHello, a Grand Rapids, Mich.-based monthly subscription club that charges members a recurring monthly membership fee.

Fees range from \$100 per month for a full membership or \$75 for an edibles-only membership. After answering a series of questions, HighHello members receive a box of cannabis products based on their preferences each month.

“Digital payment solutions allow for employees to safely deliver products without carrying [and receiving] cash,” says Aeripay’s Braun, who adds only 14% of customers say that they carry cash. “Simply put, not having a digital payment solution dampens customer spending.”

But ACH solutions, though well-suited to e-commerce, are less so in-store, where it is unlikely consumers will take the time to set up an account at the time of purchase.

“Linking a bank account through the ACH takes a few minutes, says Ryan Hamlin, chief executive and co-founder of POSaBIT Systems Corp., a Kirkland, Wash.-based payments-technology provider to cannabis merchants. “It’s rare that you will capture a customer [for one of these accounts] at the point-of-sale. It’s better to promote this payment option

to consumers outside the dispensary.”

Pitching ACH payment options to consumers via e-mail or text also opens the door to offering incentives for opening an account, as well as enrollment in the dispensary’s loyalty program.

“ACH is the best e-commerce solution dispensaries can offer until cannabis is de-scheduled at the federal level and dispensaries can accept cards,” Hamlin adds.

## THE ‘SECOND WAVE’

At the same time, the advance of payment options for cannabis merchants is leading to consolidation among payment providers.

In April, POSaBit strengthened its position with the \$7.5-million acquisition of Scottsdale, Ariz.-based Hypur Inc., a provider of payment and compliance solutions to high-risk merchants, including cannabis dispensaries, CBD retailers, and merchants that accept cryptocurrency.

What made Hypur an attractive acquisition target was that it offered an ACH-based e-commerce and mobile-payment solution, two payment options POSaBit lacked, and redundant PIN-debit processing, according to Hamlin.

In addition, the acquisition netted

POSaBit more than 150 merchant locations generating more than \$100 million in annualized gross merchandise value. Another 60 Hypur merchant locations are expected to go live within 90 days.

“This business is entering the second wave, and we are starting to see the rollup of players offering niche solutions, such as loyalty, by larger players,” Hamlin says. “We will see more consolidation as there are players looking to become one-stop shops.”

Still, payment providers are starting to butt up against a wall when it comes to offering alternative payment options. While digital wallets, text-based payment apps, and cryptocurrency solutions are available, consumers are likely to view them as less attractive than PIN debit and ACH offerings, according to Paybotic’s Miller.

There is no “PayPal of Pot solution offering ubiquity to the merchant community,” says PayQwick’s Craig. “Still, that hasn’t stopped cannabis merchants from trying [business-to-consumer payment] solutions despite their limited longevity.”

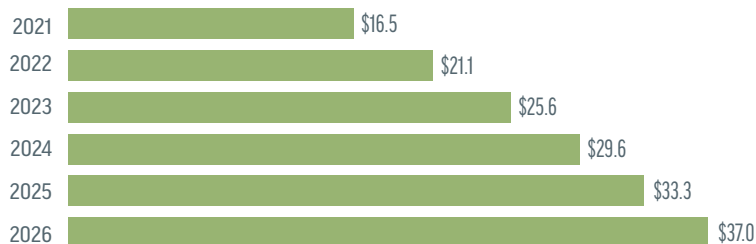
Nor has it stopped payment providers from offering incentives, such as free terminals, to cannabis dispensaries to gain space at the checkout counter.

This jockeying for space can be important, Craig says, as payment providers and processors position themselves for the day when cannabis is de-scheduled at the federal level and they can simply flip a switch to enable dispensaries to start accepting credit cards.

“De-scheduling, not rescheduling, is what will really open up this market [for processors],” Craig says. DT

## THE STEADY CLIMB OF LEGAL U.S. CANNABIS SALES

(Current and projected, in billions)



Source: Statista



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Partner opportunities  
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Aggressive & transparent buy  
rates & revenue sharing

Next & same-day funding

Cash discount



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# networks

## THE WEAKEST LINK

When fraud losses are mostly owing to consumers' naivete, how can banks and networks react? They're starting to figure that out.

BY KEVIN WOODWARD

**CONSUMERS ARE AT** the heart of person-to-person payments and criminals know it. Criminals also know consumers can be the weakest link in securing P2P payments against their attacks.

In June 2022, eight U.S. senators issued letters to the seven banks that own Zelle, which launched in 2017 as a person-to-person payment service that relied on direct access to the sender's and receiver's bank accounts. Their issue? Frauds and scams proliferated on the P2P payment network and not enough was being done to curtail them and protect consumers, they alleged.

Zelle, owned by Early Warning Services LLC, referred in a state-

ment issued last year to "misleading reports of fraud and scams" on the network and an "incomplete" analysis from outside sources. Early Warning defended its banks—Wells Fargo & Co. in particular—and said its data showed the rate of Zelle fraud at Wells was "extraordinarily low and comparable to the Zelle Network as a whole."

Then, in July, the Consumer Financial Protection Bureau, as Digital Transactions News reported, was said to be looking into fraud on peer-to-peer payment apps. Indeed, the CFPB issued the same statement for this story as it did in July 2022.

"Reports and consumer complaints of payments scams have risen sharply, and financial fraud can be devastating for victims. The CFPB is working to prevent further harm, including by ensuring that financial institutions are living up to their investigation and error-resolution obligations."

But the negative attention drawn to Zelle, and other P2P payment services, doesn't seem to have dampened any user enthusiasm.

Zelle has continued to grow. In the 2023 first quarter, Zelle's volume totaled almost \$2 billion, a 31% increase year-over-year, Scottsdale, Ariz.-based Early Warning says. Consumers and small businesses—a major Zelle user group—completed 639 million transactions in the quarter, up 29% year-over-year.





In February Zelle reported that 2.3 billion payments totaling \$629 billion were sent through its network in 2022, 26% and 28% increases, respectively, over 2021.

P2P payments volume also grew at other providers. At PayPal Holdings Inc.—which began offering peer-to-peer payments as one of its original services in the late 1990s—its Venmo P2P payment services grew by 7% in 2022 on top of a 44% growth in 2021, Dan Schulman, PayPal’s president and chief executive, said in a February earnings call.

Block Inc.’s Cash App also has grown. Its transaction-based revenue of \$409.8 million was a 75.4% increase from \$233.7 million in 2020. This excludes subscription and Bitcoin revenue generated by the app. Cash App had more than 51 million transactions globally across devices in December, up 15.9% from December 2021’s 44 million.

## MOUNTING LOSSES

Clearly, consumer and business use of P2P payments has not dulled, and, as with most other electronic payment methods, neither has criminal fondness. Consumers continue to be duped with scams and criminals continue to use P2P services to test stolen credentials, among some examples.

Factors feeding P2P payments fraud include criminal exploitation, a general lack of understanding of or failure to read the terms of service, and genuine operator error, says John Buzzard, lead analyst of fraud and security at Javelin Strategy and Research, a Pleasanton, Calif.-based advisory firm.

Criminal exploitation is when consumers are manipulated by a highly

skilled criminal using triggers that call them to action, such as emergencies or one-of-a-kind purchases, like buying a Corvette for \$500 if you act now, Buzzard says. That can result in a string of mounting losses.

“Another factor that makes P2P so attractive to fraudsters is that some apps offer the ability to search for users,” says Jane Lee, trust and safety architect at Sift, a San Francisco-based digital security firm.

Lee continues: “This feature gives fraudsters access to a vast list of users, which then allows them to easily carry out something called ‘card testing.’ Card testing involves scammers sending small sums of money to unknown users in order to verify that the stolen payment information they’re using is valid. These transactions often show up as low-value payments sent to unsuspecting recipients, who are unaware that the fraudster is using them to test stolen payment credentials.”

Sometimes the marketing of a P2P payment service can be a factor. Speed of payment in marketing materials may be more memorable for consumers than messages about security, says Gregory Hatcher, founder of White Knight Labs, a penetration-testing provider.

“When banks are doing the marketing toward their P2P apps they’re saying they are a safe and easy way

to send money fast,” Hatcher says. In addition to those messages, Hatcher would add that you better know whom you’re sending the money to.

## REAL-TIME FRAUD

The allure of P2P payments, especially faster-payment varieties, is the same for consumers and criminals, just from different sides.

“The reasons that peer-to-peer platforms are so popular with consumers are the same reasons why the platforms are popular with fraud actors,” says Ajay Guru, partner in the investigations and compliance practice who leads the fraud-technology services practice at Guidehouse, a McLean, Va.-based consulting firm. “These reasons include the instantaneous transfer capability, the ease of transacting, and immediate access to funds by the recipient.”

The immediate payment element should not be discounted, says Rob Rendell, director of fraud product marketing at NICE Actimize, an Israel-based digital-services company. “Three words...real-time payments,” Rendell says. “Real-time payments have become a double-edged sword, facilitating fast and convenient P2P transactions, while also providing an attractive target for fraudsters.”



Buzzard: “Financial institutions are starting to roll out more liberal and logical ways to intake fraud claims that include reimbursement.”



Sutherland

# Sutherland: “There is a lot of self-regulation occurring.”

That brings more criminal attention, and despite organizations’ best efforts to curb losses through real-time monitoring, “fraudsters continue to find new ways to target unsuspecting consumers and make off with ill-gotten gains,” Rendell says.

As for what may come from the legislators’ issues and the CFPB’s inquiry, some observers suggest more consumer protections may be in the offing.

“To incentivize consumers to transact, the financial-services industry has done a tremendous job training consumers that their fraud liability is very limited—thanks to the protections of Regulation E,” Guru says.

Banks are required by Regulation E in the Electronic Funds Transfer Act to reimburse consumers for so-called unauthorized funds movement. But the regulation doesn’t contemplate cases where consumers authorize the transfers as a result of fraudulent inducement.

“Consumers have become accustomed to these protections, which is why they are tremendously frustrated with the scam activity on peer-to-peer platforms,” Guru adds. “The inevitable outcome is that banks will need to assume a more significant portion of the liability for these types of transactions. Consumers need to be better protected. With those protections in place, I believe the crit-

ics in Washington will be satisfied.”

Some sort of reimbursement for consumers victimized in P2P payments fraud is likely, says Deborah Baxley, the Mobile and Touchless Payments Working Committee co-chair at the U.S. Payments Forum, a trade group.

“I personally believe a regulator, like the CFPB, will strongly encourage, or perhaps mandate, that the providers provide recourse to victims of scams,” Baxley says.

She adds that “payment providers might be required to demonstrate that suitable mitigation techniques might include matching to a list of known bad actors/IP addresses/geographies, pattern detection based on information sharing across multiple providers, or insurance or risk scores for particular transactions.”

## FROM OPTIONAL TO REQUIRED

Zelle says it is committed to strong fraud prevention. “That commitment is reflected in the fact that more than 99.9% of the [more than] 5 billion Zelle payments since launch [in 2017] were sent without any report of fraud or scams—and through Q1 2023, this rate continued to improve,” Al Ko, Early Warning chief executive, wrote in a blog post in April.

He said network-level controls to prevent bad actors from transacting on the Zelle network have been

increased. He also touted the compliance and regulation oversight in place for the network and the more than 1,900 financial institutions that connect to it.

“This collective, networkwide commitment to fraud prevention and compliance is unparalleled in the P2P space—and it is the reason fraud and scam rates continue to go down while the Zelle Network is growing across all key metrics—including now helping move a staggering nearly \$2 billion per day,” Ko wrote.

Industry-initiated preventive measures will help, but they may not be enough to stave off further regulations.

“As these processes evolve, there is a lot of self-regulation occurring,” says Kim Sutherland, vice president of fraud and identity-management strategy at LexisNexis Risk Solutions. “These processes are only going to evolve with additional protections.”

Industry efforts may yet give banks and networks a head start on potential future regulation and compliance protocols.

“Financial institutions are starting to roll out more liberal and logical ways to intake fraud claims that include reimbursement,” Javelin’s Buzzard says. “They may as well get started voluntarily. I don’t see this being optional for FIs much longer.” **DT**



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# 15TH ANNUAL FIELD GUIDE TO INNOVATIVE PAYMENTS

It's May, and that means it's time for our annual exercise to seek out and describe the payments players, apart from the big networks, that are rewriting the rules for the digital exchange of value.

BY JOHN STEWART, KEVIN WOODWARD, AND PETER LUCAS

Since 2004, Digital Transactions has traced the course of payments innovation through its nimblest practitioners—the startups, the fintechs, the smaller networks, the nonbank arrivistes—and their services and products, their strategies and tactics, their successes and pratfalls. In 2009, we distilled what we were learning about these innovators into a handy guide inside the May issue, and called it a “field guide” to what were then known, somewhat cheekily, as alternative payments.

Well, the guide worked out so well we decided to update it every May. And so you now hold in your hands the 15th edition. A few years ago, we dropped the “alternative payments” rubric and renamed our effort as a

guide to innovative payments. We think the new adjective better fits our purpose in sorting out the varied new pathways the nonbanks, and yes, banks and major networks, are forging for the payments business.

The guide is as much about strategies and tactics as it is about emerging technology and new markets. We invite you to read this guide much as you have since 2009, with an eye to how it might inform your decisions, sharpen your competitive instincts, and bring to light, perhaps, some developments you had not encountered before—as well as spotlight some potential partners.

Digital Transactions generally defines an innovative payment system as any network or consumer interface (a mobile app, for example) that enables

payments in a way that relies on or stands apart from a major network and/or stands between that network and the consumer in an important way. We emphasize consumer-facing payment systems, but of course many, if not most, of the systems profiled here market themselves to merchants to maximize acceptance of their products.

Information for the listings comes from news reports over the past year, company Web sites and spokespersons, and financial filings in a few cases. We mention pricing for the merchant and consumer when it is relevant and publicly available. The “Year Founded” line refers to the year the particular service was founded, not the parent company, except in those cases where the two coincide.

# ALIPAY

**PARENT:** Ant Financial Services Group

**HEADQUARTERS:** Pudong, Shanghai, China

**FOUNDED:** 2004

**WEB:** [global.alipay.com/index.htm](https://global.alipay.com/index.htm)

**FIELD NOTES:** Alipay's latest development is to offer a Pay After Delivery option built on Splitit Payments Ltd.'s technology. Splitit is a white-label buy now, pay later provider. Pay After Delivery allows consumers to make a purchase using a credit card, then pay for it after delivery. The payment option is being offered at Alipay's request, a Splitit spokesperson says. AliExpress is an e-commerce marketplace owned by Alibaba Group Holdings Ltd., which operates the Alibaba.com marketplace and holds a 33%

stake in Alipay. Founded in 2004, Alipay has grown into what is said to be one of the largest mobile-payments services globally. It has also made prior moves to penetrate the U.S. payments market, including a deal with the Guess? Inc. chain in 2018. Before that, it had concluded a deal to collaborate with the big U.S. processor First Data Corp., now part of Fiserv Inc., to process mobile payments for U.S. sellers that attract significant numbers of Chinese tourists.

# AMAZON PAY (includes Amazon One)

**PARENT:** Amazon.com Inc.

**HEADQUARTERS:** Seattle, WA

**FOUNDED:** 2007 (including predecessor services)

**WEB:** [pay.amazon.com](https://pay.amazon.com)

**FIELD NOTES:** Amazon made a big splash early this year with the announcement the first non-Amazon-owned merchant would accept Amazon One, its biometric payment product. Panera Bread was to test the palm-print payment technology at select locations in St. Louis, Mo. The deployment of Amazon One, which links a customer's payment card to his or her palm print, is expected to make it easier for Panera customers to access their rewards, as the palm-reading technology also identifies users enrolled in the sandwich chain's loyalty program. The chain, which is reportedly the first national restaurant

operator to install Amazon One, has more than 52 million consumers enrolled in its loyalty program, and plans to expand Amazon One to more locations. Panera has 2,113 company and franchise operated bakery-café in 48 states and Ontario, Canada, operating under the Panera Bread or Saint Louis Bread Co. names. The Amazon Pay wallet, which allows users to store credit and debit cards, includes the ability to pay by voice via Amazon's Alexa technology. Alexa can also alert users when a delivery is made or when a bill comes due. Amazon Pay Deals, meanwhile, presents offers meant to be exclusive to users.

# APPLE PAY

**PARENT:** Apple Inc.

**HEADQUARTERS:** Cupertino, CA

**FOUNDED:** 2014

**WEB:** [apple.com/apple-pay](https://apple.com/apple-pay)

**FIELD NOTES:** Several months after announcing a buy now, pay later service, Apple Inc. finally launched Apple Pay Later in March, albeit to a limited number of Apple Pay users. The self-financed installment-payment service works much like other BNPL services by spreading four payments over a six-week period for purchases between \$50 and \$1,000. Apple also is conducting the credit assessment and lending steps and intends to report consumer activity to U.S. credit bureaus. Apple Pay Later uses Mastercard

Inc.'s installment-payment infrastructure. The BNPL service complements the Apple Card, a credit card issued by Goldman Sachs, which debuted in 2019. In other Apple Pay news, PayPal added it as an online checkout option for small businesses. And grocer Ralphs began accepting Apple Pay in late 2022. Ralphs is owned by Kroger Co., which launched its proprietary mobile-payments service Kroger Pay in 2019.

# BLOCKCHAIN

**FOUNDED:** 2010

**FIELD NOTES:** Since blockchain architecture emerged more than a decade ago, it has spawned dozens of cryptocurrencies and even lent itself to slick applications that bind parties to a transaction, such as smart contracts. But it remains the object of skepticism—even scorn—among many in payments and finance. Events of the past year—most prominently, the utter collapse of the big FTX exchange—have served to fuel that fire. Later,

the failure of crypto-friendly Silicon Valley Bank and Signature Bank only added to the ignominy in which blockchain found itself. Still, many adherents hold out for Bitcoin, whose value roller-coasted through 2022 and into 2023, and for the possibility of a digital dollar, a national currency managed by the Federal Reserve.

# BNPL (Affirm, Klarna, Splitit)

**FIELD NOTES:** From vacations and cannabis products to business-to-business purchases, there isn't much consumers can't purchase with a buy now, pay later loan. The seeming ubiquity of BNPL loans, which allow consumers to pay for a purchase over a preset number of monthly payments, is predicted to catapult the number of BNPL users to more than 900 million by 2027, up from 360 million in 2020, says Juniper Research. The growth is expected to be driven in part by increasing demand for low-cost credit solutions and consumers' desire to increase their buying power during inflationary times.

Despite the rosy outlook, BNPL providers are not immune to downturns. Rising interest rates forced Affirm Holdings Inc. to announce lower-than-expected financial results for the fourth quarter of 2022 and lay off 19% of its workforce. Nevertheless, competitors continue to find new ways to grow. Klarna AB has added its BNPL option to Ingenico's cloud-based payments-as-a-platform service, while Splitit Payments Ltd. is available on Alipay's AliExpress e-commerce marketplace.

## CASH APP

**PARENT:** Block Inc.

**HEADQUARTERS:** San Francisco, CA

**FOUNDED:** 2013

**WEB:** Cash.app

**FIELD NOTES:** By January, Block's Cash App wallet had attracted 18 million active users, enough to add yet another new feature: Cash App Savings. The feature lets users save money by rounding up purchases when using the app and setting savings goals. Block can offer the feature because it owns Square Financial Services, a bank chartered by the Federal Deposit Insurance Corp. and Utah Department of Financial Services. This adds to Cash App's already wide utility. The wallet lets users transfer money, use direct deposit, deploy a linked card, and buy Bitcoin, the favorite cryptocurrency of Block CEO Jack Dorsey. Such moves are paying off handsomely,

with Cash App generating more than half of Block's gross profit in 2022's fourth quarter, or \$848 million, up fully 64% year-over-year. That makes Cash App bigger than Square, the point-of-sale technology business the company started with 14 years ago. Now, Block is trying to link its two chief businesses. An example: late last year, the company launched a "Discover" tab that lets users zero in on Square merchants that accept Cash App Pay, the app's payment facility. And Cash App is now being offered to merchants that accept Afterpay, the buy now, pay later platform Block paid \$29 billion to acquire last year.

## CLOVER

**PARENT:** Fiserv Inc.

**HEADQUARTERS:** Sunnyvale, CA

**FOUNDED:** 2012

**WEB:** Clover.com

**FIELD NOTES:** Clover, processing giant Fiserv's point-of-sale technology, continues to be a potent growth engine. Clover posted \$232 billion in gross payment volume in 2022. Merchant volume and transactions grew 6% and 3%, respectively, during the fourth quarter. Helping fuel Clover's growth were deals with AMS Global, a Los Angeles-based venue and event-management company, to install more than 1,000 point-of-sale devices from Fiserv's Clover Sport unit across three New Orleans sports and entertainment venues.

The terminals will enable fans to make digital, contactless, and self-service purchases at kiosks and grab-and-go marketplaces, as well as access mobile ordering, loyalty, and stored-value payment options. At the time of the deal, more than 300 sports and entertainment venues were already using Clover Sport to provide payment and marketing services to fans. Clover also has a footprint in the buy now, pay later space, enabling merchants using its POS terminals to offer BNPL loans through Synchrony Financial.

## GOOGLE WALLET

**PARENT:** Alphabet Inc.

**HEADQUARTERS:** Mountain View, CA

**FOUNDED:** Android Pay, 2015; Google Wallet, 2011

**WEB:** pay.Google.com

**FIELD NOTES:** Google Wallet exponentially expanded its potential user base with the 2022 availability in 12 more countries for a total of 57. Google Wallet was relaunched in 2022 to accommodate digital elements, such as driver's licenses and vaccine cards. It also launched WearOS, an operating system for smart watches and other wearables. Google Wallet added support for tapping and paying for public transit rides

and the ability to save digital tickets for events and to access airline boarding passes. The decision to enable Google Wallet to be accepted by mass-transit systems was driven by consumers' growing preference for contactless payment transactions, especially since the onset of the Covid-19 pandemic. Google also added support for two Fitbit wearables as well as the Google Pixel Watch.

## MAGICCUBE

**PARENT:** MagicCube Inc.

**HEADQUARTERS:** Santa Clara, CA

**FOUNDED:** 2014

**WEB:** MagicCube.co

**FIELD NOTES:** Magic Cube has added a new wrinkle to its strategy of enabling merchants to accept card payments with an off-the-shelf mobile device. It has struck agreements with mobile-device makers to make its iAccept platform the only such technology they will use in North America. MagicCube has reached agreements with France-based MobiWire Group and Belgium-based Oona, a unit of Finland-based Aava Mobile Oy. The deals will help create an ecosystem around iAccept through exclusive partnerships with mobile-device makers that will afford MagicCube more control

over such matters as performance, usability, and security, says chief executive Sam Shawki. MagicCube has also added several new features to make its platform attractive to large merchants. Enhancements include: multi-acquirer and multi-merchant support from a single platform; direct integration into complex systems without affecting scope or certification with respect to the PCI data-security standard; and unchanged transaction routing with full control of the existing acquirer and merchant flows.

## MARQETA

**PARENT:** Marqeta, Inc.

**HEADQUARTERS:** Oakland, CA

**FOUNDED:** 2010

**WEB:** Marqeta.com

**FIELD NOTES:** This card-issuing platform has been a roll of late. Marqeta kicked off 2023 by enabling card issuers to use its tokenization technology to push tokenized cards to consumers' mobile devices. Consumers can then use those cards to make purchases. The new technology, called web push provisioning helps reduce mobile-payments friction by eliminating the need to download an app to enable payment. Instead, card issuers can push tokenized cards directly to a consumer's mobile device

from the consumer's Web browser. The capability is expected to increase mobile-wallet usage and reduce abandonment of wallet-based transactions. Marqeta has also partnered with Bread Financial to launch the Bread Pay One-Time Use Card, a virtual credit card that allows consumers to pay for purchases in four installments. The company meanwhile launched Risk-Control, a set of risk-management and compliance tools to help issuers on its platform streamline their risks.



## MERCHANT WALLETS (Dunkin'/DD Perks, Kohl's Pay, Kroger Pay, Starbucks Rewards, Target, Walmart Pay)

**FIELD NOTES:** Mobile wallets offer merchants a perfect mix of technology and innovation to stay ahead of the curve in the rapidly evolving world of digital payments. For example, many, if not all, of the merchants in this category enable their wallet users to pay online or in-store using a one-time quick-response code that securely transmits payment and loyalty information at checkout. The Starbucks app is so powerful that, in the first quarter of

2023, the mobile order and pay channel, along with drive-thru and delivery, drove 72% of the coffee retailer's U.S. revenue. Starbucks Rewards, which is closely tied to the app, surpassed 30 million members by the end of 2022, with mobile order use accounting for 27% of transactions at U.S. company-operated locations, Starbucks said. More than \$3.3 billion in value was loaded onto Starbucks cards in the first quarter.

## MERCEDES PAY

**PARENT:** Mercedes-Benz Group. **HEADQUARTERS:** Stuttgart, Germany **FOUNDED:** 2023 **WEB:** [mercedes-benz-mobility.com/en/what-we-do/payment-services/mercedes-pay-plus/](https://mercedes-benz-mobility.com/en/what-we-do/payment-services/mercedes-pay-plus/)

**FIELD NOTES:** Mercedes-Benz has turned a car into a payment device with the release of Mercedes pay+, its in-car payment service. Offered initially in five European models, the service will also be available in U.S. vehicles, though Mercedes-Benz would not say when. Mercedes-Benz is the first, with its Mercedes pay+ technology, to use Visa Inc.'s Delegated Authentication and Cloud Token Framework. The Delegated Authentication service enables an issuer to "delegate authority" to a third party, such as a wallet provider or merchant. Its Cloud Token Framework enables a

connected device to become a secure channel for digital commerce. Mercedes-Benz announced in 2021 that it and Visa were working on a native in-car payment service that it had hoped to launch in 2022. In Mercedes pay+, the technologies are integrated into the native in-car payment service, enabling the vehicle itself to provide biometric two-factor authentication in conjunction with a fingerprint sensor. Earlier versions of in-car payment services relied on a user's mobile phone as one element of the two-factor setup.

## OPEN BANKING (MX Technologies Inc., Finicity, Plaid Inc.)

**FIELD NOTES:** As with so many trends in payments, open banking is being driven not by banks but by fintechs. Some 78% of fintechs say open banking is now relevant to their business, according to a study released last fall by Discover Global Network and 451 Research. Consumers like the technology because it offers faster credit approvals and a consolidated view of their financial accounts. Meanwhile, the study indicated some 87% of U.S. consumers have at least one fintech app on a smart phone, and 49% have three or more, underscoring the salience of open banking. The technology lets

fintechs and other nonbank payments providers access consumer accounts to verify balances. But regulation may not be far off. The Consumer Financial Protection Bureau last fall released an outline of what it calls a "data-rights rule" that would govern how consumers' financial information is to be shared among such players as banks and payments companies. The proposed rule aims at preventing financial institutions and other keepers of consumer data from monopolizing that control to prevent competition from other firms and to keep customers from moving to other providers.

## PAYMENTS ORCHESTRATION

**FIELD NOTES:** Just as a conductor evokes sweet notes from a collection of players who could just as easily be producing a cacophony, this technology uses application programming interfaces to select just the most efficient providers and payments routes to handle the customer's payment choice at just the moment of the transaction. The technology is very recent, but already the payments industry seems to be settling on the proper vocabulary for it. The programming is widely referred to as a "payments-orchestration layer" that lies between the merchant and his processor. If working properly, it helps

online merchants, large and small, manage enormous increases in demand from jurisdictions where parsing currency conversions, local payment methods, alternative payment methods, routing choices, and payment processors can be a very bad headache. The idea is to orchestrate all the elements of a transaction—acceptance of the customer's payment choice, just the right gateway, and the right processor—to satisfy the customer. The goal is to avoid cart abandonment and keep the merchant's transaction price at the lowest level that can still meet all the various networking costs.

## PAYPAL

**PARENT:** PayPal Holdings Inc.

**HEADQUARTERS:** San Francisco, CA

**FOUNDED:** 1998

**WEB:** [PayPal.com](https://www.paypal.com)

**FIELD NOTES:** 2023's second quarter started out with a bang for PayPal, as its Braintree unit won a contract to process transactions for TicketMaster, the giant events-ticketing supplier—a big win considering live events are resuming following the worst of the pandemic. Indeed, Ticketmaster's parent, Live Nation Entertainment Inc., reports the unit processed \$27.5 billion in ticket volume last year, up fully 54% from 2019. What's more, PayPal says its entire range of payments services, including Venmo, PayPal Checkout, and PayPal Later, its buy now, pay later product, can all be used on Ticketmaster. But this development followed another big deal:

PayPal's agreement to support transactions on Apple Inc.'s Tap to Pay on iPhone technology, which lets merchants process cards with a tap on an ordinary iPhone. This move in turn was followed in April with the announcement that PayPal merchants can offer Apple Pay at checkout. But PayPal must soon replace its top executive. Long-time PayPal president and chief executive Dan Schulman stunned the industry in February by announcing he will retire at year's end, while retaining a seat on the board. That has set off a search for a replacement to run the massive payments company.

## PAY NEAR ME

**PARENT:** PayNearMe, Inc.

**HEADQUARTERS:** Santa Clara, CA

**FOUNDED:** 2009

**WEB:** [home.paynearme.com](https://home.paynearme.com)

**FIELD NOTES:** PayNearMe has been making lots of waves with its payment platform. The company has established a substantial footprint in iGaming. Its deal with Lottery Now Inc., which operates the Mido Lotto lottery in nine states, enables consumers to purchase tickets with, as well as make deposits to and withdrawals from, their Mido Lotto digital wallets using credit and debit cards, Venmo, and PayPal through PayNearMe's MoneyLine app. The MoneyLine app, launched in 2021, also supports cash

and automated clearing house payments. PayNearMe has iGaming and sports betting operations in about 20 states and has developed a mobile app that facilitates cardless payouts through a network of 20,000 ATMs nationwide. PayNearMe also scored a coup for its bill-payment network, inking a deal with Walgreens Co. The deal adds 9,000 Walgreens and Duane Reade locations to PayNearMe's merchant network, bringing the company's total to more than 40,000 retail locations.

## PAZE

**PARENT:** Early Warning Services

**HEADQUARTERS:** Scottsdale, AZ

**FOUNDED:** 2023

**WEB:** [paze.com](https://paze.com)

**FIELD NOTES:** In March, the big-bank-owned Early Warning operation, the creator of the Zelle peer-to-peer payments network (see Zelle entry below), launched what is likely to be its most ambitious project yet—a digital wallet owned and controlled by banks and open to multiple bank-issued cards. Many details remain to be spelled out, but the wallet, aimed exclusively at e-commerce use, will be tested this summer and made available generally in the fall. With a wide scope of issuers, EWS expects banks representing

150 million cards to be participating in Paze by the time of the commercial launch. Cardholders at participating banks will see their cards preloaded in a Paze wallet. The introduction of Paze follows months of speculation about EWS's wallet project, news of which first emerged in January. The banks that own the Scottsdale, Ariz.-based company—Bank of America, Capital One, JPMorgan Chase, PNC Bank, Truist, U.S. Bank and Wells Fargo—are also among the nation's largest card issuers.

## REAL-TIME PAYMENTS/FEDNOW/THE CLEARINGHOUSE

**FIELD NOTES:** Long a matter of half action, half speculation, the concept of real-time payments took on momentum with the Federal Reserve's announcement in March that it has narrowed its launch window to July for its long-awaited FedNow real-time payments network. Formal certification for potential participant was to start last month, while so-called early adopters were finishing a test program to be ready to transmit live payments. The new network, which the Fed has been working on for nearly four years, is a huge development in payments, but the nation's banking regulator is coming rather late to the party. The Clearing House Payments Co.'s Real

Time Payments system, for example, has been commercially available to banks since 2017, and now serves nearly 300 financial institutions. Nor are cardholders without the ability to send money instantly: Visa has offered Visa Direct since 2014, and was followed by Mastercard with Mastercard Send a year later. Still, no network can claim the reach and power of the Fed. Access to FedNow will come through the FedLine network, which is used by more than 10,000 financial institutions, either directly or through agents, for transaction clearing and data transmission.

## SECURE REMOTE COMMERCE (a.k.a. Click to Pay)

**PARENT:** American Express, Discover, Mastercard, Visa

**FOUNDED:** 2019

**WEB:** [EMVCo.com](https://EMVCo.com)

**FIELD NOTES:** Secure Remote Commerce is not so much a brand as a behind-the-scenes digital-payment mechanism developed by EMVCo, the standards body controlled by the global payment card networks. Referred to as "click to pay" by the networks, SRC's purpose is to replace the clutter of payment brands on e-commerce checkout pages with a common buy button that offers a unified and simple purchase process. With e-commerce booming, the simplified checkout is getting a workout. CardX, a surcharging platform

owned by Stax, added the Mastercard iteration of Click to Pay to its platform. At the time of purchase, CardX informs the customer paying with a credit card the cost of the surcharge and displays the total amount of purchase. CardX also gives consumers the option to pay with an alternative payment method that will not incur a surcharge. In either case, merchants receive 100% of the sale amount. When a consumer pays using a debit card, the CardX platform identifies the card as a debit card and does not levy a surcharge.

## STRIPE

**PARENT:** Stripe, Inc.

**HEADQUARTERS:** San Francisco, CA & Dublin, Ireland

**FOUNDED:** 2010

**WEB:** [stripe.com](https://stripe.com)

**FIELD NOTES:** No stranger to innovation, Stripe has upped its game significantly in 2023 by partnering with Open AI, the San Francisco-based creator of the ChatGPT artificial-intelligence chatbot, to enable payments for Open AI's ChatGPT Plus and DALL-E applications. Stripe will also incorporate OpenAI's new natural-language technology, GPT-4, into its products and services. The partnership marks one of the first uses of ChatGPT technology for payments. Prior to the deal with Open AI, Stripe made its Tap to Pay functionality for

Android phones and tablets available in the United States, United Kingdom, Canada, New Zealand, Australia, and Singapore. Stripe launched Tap to Pay for iPhone in 2022. Despite not seeing the "breakneck" growth it did in 2020 and 2021, Stripe still processed more than \$817 billion in total volume in 2022, up 26% from the previous year. More than 100 companies each handle more than \$1 billion in payments with Stripe each year, a figure that has grown by more than 50% yearly since 2018, Stripe says.

## TAP TO PAY (iPhone and Android)

**FIELD NOTES:** The smart phone has undergone another transformation in the payments world. Now, it's not just a connectivity device for payment-acceptance dongles but can become the secure payment device itself with the advent of more tap-to-pay services. Long available for Android devices, an iOS-compatible service for iPhone launched last year and has gained traction with several payment processors. Called Tap to Pay on iPhone, the service enables a commercially available, off-the-shelf iPhone to act as payment terminal for NFC-enabled transactions. Merchants are able to unlock contactless payment acceptance through a supporting iOS app on an iPhone XS or later device. At checkout, the merchant will prompt the customer to hold their iPhone or Apple Watch to pay with Apple Pay, their contactless credit or debit card, or other digital wallet near the merchant's

iPhone, and the payment will be completed using NFC technology. Apple said all Tap to Pay on iPhone transactions will be encrypted and processed using the Secure Element in iPhone. It's not just iOS devices with this capability (see MagicCube entry), as developers are creating Android-based services. Pace Software has developed a software-based terminal following the mobile payments on COTS standard—MPoC—from the PCI Security Standards Council. Pace expects to complete certification in May. Once that's done, the software will be available through the independent sales organization channel at 3 cents per transaction with no monthly fee or set up, says David Leppek, Pace president. Android is supported now with an Apple version in the works. A version of the software is on some Ingenico Axiom terminals, with plans to support all Android terminals eventually.

## VENMO

**PARENT:** PayPal Holdings, Inc.

**HEADQUARTERS:** San Francisco, CA

**FOUNDED:** 2009

**WEB:** venmo.com

**FIELD NOTES:** Few person-to-person payment networks can boast the volume and reach of Venmo, acquired by PayPal in 2013 as part of the Braintree deal and since then a sister P2P service to PayPal itself. In March, both services were recruited by processor ACI Worldwide Inc. to allow taxpayers to make federal tax payments through ACI Payments Inc. It's the first time Venmo has been offered as an option for federal taxes, according to ACI. PayPal reported in February its Venmo volume reached \$62.5 billion in the fourth quarter, up 3% year-over-year and a notable slowdown from a 29%

pace in 2021's fourth quarter. The service includes more than 78 million users, most of them in the United States, according to Business of Apps. It is likely to benefit from an upcoming development that will let users of one P2P service pay users of another, even if the two users are on different networks. The system, announced last month by Visa Inc. and dubbed Visa+, will start up with a test later this year involving Venmo and PayPal, then expand next year to include interoperability with DailyPay, i2c, TabaPay, and Western Union.

## VISA TAP TO PAY

**PARENT:** Visa

**HEADQUARTERS:** San Francisco, CA

**FOUNDED:** 2021

**WEB:** [usa.visa.com/pay-with-visa/contactless-payments/contactless-payments.html](https://usa.visa.com/pay-with-visa/contactless-payments/contactless-payments.html)

**FIELD NOTES:** Visa Tap to Pay got to play on a global stage last year as Visa showcased the technology at the 2022 FIFA World Cup last November. Visa deployed 5,300 contactless-enabled payment terminals at official FIFA venues and enabled taxis in Doha, Qatar, capital of the host country, to accept contactless payments by card or smart phone. Tap-to-pay uses short-range wireless technology to make secure payments between a contactless card or payment-enabled mobile/wearable device and contactless-enabled POS terminals. Visa's Tap to Phone technology, which launched in 2021,

enables merchants to securely accept contactless payments on their near-field enabled Android and Apple smart phones by downloading an app. The card network's Tap to Phone partner program allows acquirers to build and certify a Tap to Phone solution by themselves or partner with an approved third-party. Thousands of merchants in the United States use Visa Tap to Pay including such chain as 7-Eleven, Costco, CVS, Dunkin Donuts, McDonalds, Starbucks, Subway, Walgreen's, and Whole Foods.

## ZELLE

**PARENT:** Early Warning Services LLC

**HEADQUARTERS:** Scottsdale, AZ

**FOUNDED:** 2011 (as ClearXchange)

**WEB:** ZellePay.com

**FIELD NOTES:** Having established itself as a consumer favorite, Zelle is looking to achieve the same status with small businesses. Small businesses received more than 150 million payments through Zelle totaling more than \$72 billion in 2022, an 84% increase from a year earlier. While Zelle says it is still in the early stages of attracting small-business volume, it notes that small businesses are making up more of its payments. Overall, consumers and businesses sent 2.3 billion payments totaling \$629 billion through Zelle in 2022. Transaction

volumes through Zelle increased 26% in 2022 compared to 2021, while total transaction value increased 28%. That was the good news. The bad news was Zelle drew scrutiny from members of the United States Senate in late 2022 over consumer fraud and scams perpetrated on the network. Several member banks responded to the controversy by developing plans to reimburse victims, while Zelle pointed out more than 99.9% of payments on the network were sent without any report of fraud or scams.



## THREE WAYS AI AND ML CAN MAKE PAYMENTS DATA WORK FOR YOU

If data is the new oil, here's how billers can refine that resource for the best revenue results.

BY **ROGER PORTELA**

Roger Portela is the senior director of product at PayNearMe.

**IN 2006, MATHEMATICIAN** Clive Humby coined the phrase, “Data is the new oil,” and that couldn't be truer today. Like oil, data is a valuable commodity that must be refined to make it useful. Data can also serve as an asset and investment that can put power and influence into a company's hands, just as oil has done for more than a century.

But how can data be transformed from an overwhelming mass of statistics and percentages into actionable insights that can support real-time decision-making? The answer is twofold: artificial intelligence (AI) and machine learning (ML).

AI and ML work especially well in the payments industry because of the large troves of data collected each day related to customers' payments history and behavior. If you work with a technically advanced payments provider, it can apply AI and ML algorithms to this data that identify trends and patterns in real-time, make logic-based predictions, and automate actions to avoid or proactively resolve common problems.

In this article, we'll explore three ways your payments provider can use AI and ML to “refine” your data, turning it into a more valuable asset for your business:

### **1. Enhance customer support and drive self-service**

AI and ML can be used to improve self-service adoption. For instance, an ML model can identify customers waiting in the call center and send them messages with personalized links to pay. A simple tap or click will take them directly to their payment screen to encourage self-pay. AI can also pinpoint reliable payers who are not using auto-pay and send them targeted engagement messaging with links for easy sign up.

For customers with a history of late payment, AI can automatically send a



message suggesting self-service ways to reconcile, such as moving their payment date to coincide with their payday, or breaking payments into multiple payments throughout the month. This gives customers buy-in into how they want to proceed, which ensures compliance. And it empowers self-service rather than having those customers call a service agent to hear their options.

Very soon, your payments provider may also be able to create chatbots powered by machine-learning algorithms that assist customers who have standard questions or payment issues. This could provide fast and efficient service for customers and nudge them toward payment.

The benefit of AI is that it conducts data analysis with minimal human intervention—getting better over time through machine learning—and then automatically initiates the most logical interventions. This saves customer service centers from getting bogged down with low-level tasks so they can focus on more complex or specialized issues. At the same time, payors gain more autonomy through self-pay and have a more efficient and satisfying payment experience.

## 2. Forecast payment shifts for better planning and protection

Your payments provider can use AI techniques to track and compare large sets of payments data, flagging any unusual patterns or behaviors that could indicate potential fraud. If a series of unusual events indicates a potential threat, such as anomalies in the data of a disbursement recipient, AI tools can detect it in real-time and notify the payments provider so it can authenticate the transaction

and increase surveillance and security measures.

AI also can be used to analyze cohorts of customers based on hundreds of data points—from third-party data sources to online activity—and assign them a risk score. Data from government sources, such as inflation, unemployment, and gross domestic product reports, can also help predict macroeconomic downturns that could impact payments. Based on these risk profiles, the payments provider can help businesses determine which customers are more likely to pay late or miss payments, and create outreach tools that alert those customers when a payment date is approaching or already passed.

AI is perfect for this task because it can analyze large amounts of data from multiple sources in real time and make logic-based predictions at a granular level. This can help billers prepare for changes in payor behavior that could impact revenue streams.

## 3. Automate fixes to common payment problems

AI and ML allow you to automate solutions to common payment problems, such as frequent automated clearing house returns, chargebacks, and NSF's. Your payments provider can develop ML models that initiate a change to business rules when a customer hits a particular milestone. For instance, once a customer has two

or more ACH returns in less than six months, AI can apply a rule requiring the customer to pay with cash or card only.

AI also can be used to identify customers with a pattern of late payments and initiate automated engagement messaging. The first message might be a payment reminder via text message, email, digital wallet, or push notification. A second message could be a personalized email outlining the customer's payment schedule, payment amount, and any additional fees or charges, so the customer is clear on the obligation. For the most chronic late-payors, AI might offer solutions like splitting payments, adjusting the payment due date, or initiating a conversation.

When AI and ML identifies and automatically fixes payment issues, companies can reduce the time staff members spend manually resolving payment problems. And, because the ML model continues to learn and apply its findings, it can identify the solutions that best accomplish your goal and automatically applies those to future responses. In other words, if one message, strategy, or business rule improves on-time payment the most, it learns the nature of that response and applies its findings to future decisions.

AI and ML make data useful to billers by taking large amounts of



Portela:  
Accessible  
data can be a  
competitive edge.

raw information and turning them into useful insights and practical applications. But the other necessary step toward refining data is data democratization, where payments providers and billers work together to put data in the hands of all stakeholders who can benefit.

Step one of data democratization starts with a payments provider committed to making payments data accessible to its clients. To do that, the payments provider should have a data warehouse where it compiles data in one place, scrubs it of protected personal information, and offers it to clients in raw form or in an array of helpful reporting dashboards.

The payments provider can also provide benchmark data in agree-

gate, including payments platform data, anonymized client data, and companies of comparable size, type, or regional location. This data can be compared side-by-side with your own data to reveal any outliers that may need improving—for instance, higher rates of ACH returns or lower adoption of autopay.

Finally, the right payments provider should be able to provide external data that offers additional insights. That might include data from credit bureaus that can help your company determine the risk profile of an individual or cohort, or identify fraudulent activity that may warrant extra caution.

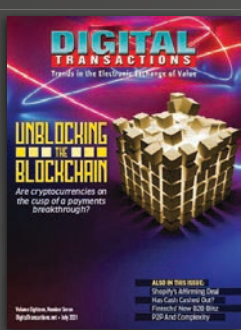
Even weather-forecast data can prepare you for the impacts of a major

storm, when customers might lose power or have to evacuate, impacting the timeliness of payment and the type of customer messages you distribute.

Partnering with the right payments provider makes all the difference. When that's in place, billers can make that data available to everyone in their organization who can use it, from sales and marketing to finance and customer service.

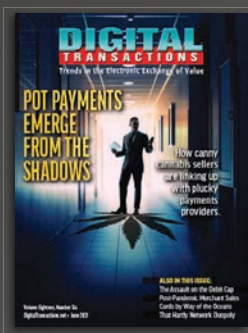
Just like oil, data is most valuable when fully accessible and available to fuel the decisions your team makes every day. Those who achieve that goal will have a competitive edge in understanding and supporting their customers and achieving operational efficiencies both now and in the future. **DT**

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## DIGITAL PAYMENTS AS A COMPETITIVE ADVANTAGE

Small businesses can take on bigger rivals and win—if they're open to the latest technology.

BY MARK BISHOPP

Mark Bishopp is senior vice president of embedded payments and partnerships at Fortis.



**SMALL- AND MEDIUM-**size businesses respond differently to major shifts in how people find and purchase products and services. Some look at major changes as an opportunity to adopt new resources for getting the most bang for their buck.

Others tend to lag behind. They're waiting for proof of concept. Or they're making sure the change sticks before investing in the time and effort needed to keep up with innovations already embraced by larger competitors.

For businesses waiting to innovate, the consequences can be dramatic. A great example of this is how restaurants responded to the sudden drop in indoor dining during the pandemic. Those already equipped with a digital infrastructure—as well as those that had leveraged third-party platforms to let customers choose and pay for items online—were able to pivot to curbside pickup or delivery.

Others, hoping the crisis would quickly pass, found themselves struggling to play catchup to remain competitive.

The pandemic significantly increased the use of digital-payment solutions across business sectors, and that change is here to stay. But adoption rates are still lower

among SMBs. If they want to win in the future, these companies must consider adopting digital payments, if only to keep up with larger competitors. Such payment choices are now expected by consumers.

### SOPHISTICATION IS KEY

When it comes to digital payments and other types of business-technology adoption, larger organizations tend to lead the way. For example, the Apple Store offers an entirely digital experience from check-in to issue resolution to payment. The company has been a leader in the digital experience for more than a decade and has inspired other businesses to follow suit.

Starbucks is another example of a digital leader that offers an experience that feels connected and seamless. Their gift and loyalty programs are so intuitive that even people who aren't early-technology adopters fully understand and use the technical capabilities—such as accruing and spending rewards—in a seamless way.

Larger companies are setting expectations for consumers, and that has a waterfall effect that requires a response from other companies, especially SMBs.

Smaller companies are being forced to offer digital experiences to customers or lose their business completely to competitors. Companies that offer such experiences can benefit not just by speeding up payments, but also by creating closer relationships with customers through loyalty and other types of interactive programs.

This may seem counterintuitive. After all, many observers earlier in the digital age imagined these experience would be impersonal. But companies like Apple and Starbucks have shown outreach at scale and with digital tools can be highly personalized and tailored to customers' unique preferences.

A sophisticated digital ecosystem can provide other advantages too, including faster reconciliation of payments on the backend, tighter inventory control, and more rapid outgoing payments to staff and vendors.

Apps like DoorDash and Lyft streamline the customer experience, but they also make possible other valuable services. The people providing the services can get paid daily, for example, and those who are unbanked can participate in the digital economy without credit cards and checking accounts.

A digital ecosystem can also reconnect businesses like professional and trade services with their clients and customers. For example, as health-care coverage in the United States becomes more complex, those who make it easy for the patient to view their costs and pay digitally are winning business from their cash-based competition, where write-offs seem to be the norm.

And, thanks to the growing use of digital payments, consumers have a rising level of comfort with sharing financial information for transactions. That allows professional-services firms and trade-service providers to accelerate payments and back-office processing, as big retailers now do.

A service provider like a small plumbing business can accept payment via Venmo or another digital service instead of mailing an invoice and collecting a paper check. When integrated with business software, digital payments can also accelerate receivables and remove intermediaries from the service provider-customer relationship, enabling providers to offer arrangements like payment plans directly.

## TABLE STAKES

If you visited an Apple store 10 years ago, the seamless digital experience might have felt futuristic. Now, the "Apple experience" is expected. Consumers are accustomed to using their devices to order goods and services, check in when they arrive at a business, and make digital payments automatically or at the point of sale.

In other words, digital payments are now table stakes. That means smaller companies that don't offer digital-payment options risk being left behind by competitors that do.

The good news is that SMBs don't have to pay a developer to create digital-payments capabilities in-house. They can access public payments platforms to manage simple transactions. Or they can partner with a vendor to create a more sophisticated and holistic digital experience that takes advantage of back-end capabilities, such as application programming interfaces (APIs). This technology allows data to flow seamlessly in real time and lets business leaders make better, faster decisions while remaining focused on core competencies.

Forward-thinking companies led the way, but big businesses like Apple and Starbucks can serve as a guiding North Star to smaller companies that want to offer similar digital experiences. These could be as simple as mobile payments that integrate with existing software or more sophisticated capabilities.

In sum, by embracing digital experiences, including payments, smaller businesses get two key advantages. They can compete and win against larger competitors, and they can reconnect with customers on a more personal level. DT

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