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Trends in the Electronic Exchange of Value

11th Annual

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the gimlet eye

REMEMBER THAT PREPAID RULE?

TALK ABOUT AN ANTICLIMAX. Did anyone really notice that on April 1 the Consumer Financial Protection Bureau's long-dreaded diktat regulating the prepaid industry finally took effect? We took note of the event, of course, in our daily news service, *Digital Transactions News,* because that's our job. But though we bent our ear, we heard none of the wailing and gnashing of teeth we were led to expect from the $700-billion U.S. prepaid card industry.

At first, this seemed surprising. After all, opposition to this 1,600-page tome of regulation was at one time so fierce that a hostile Congress tried to scupper the whole thing. At the time, much concern centered on the rule's unwieldy bulk. After all, what snares might lurk for the unwary in all those pages?

That's the lingering reservation Ben Jackson, chief operating officer of the Innovative Payments Association, a prepaid-industry trade group, passed on to us when we reported on the rule taking effect. "Where people are concerned is that's a really big rule with a lot of moving parts," he told us. "Could there be a gotcha in there?"

But if today—seven years after the CFPB started planning for regulation of the prepaid market and three years after it published its final rule (with two deadline extensions afterward)—enough time has passed to allow issuers and program managers to make adjustments. Even making the language on card packaging compliant—something that was once a big concern—seems no longer to be the hardship it once was.

That's not to say all queasiness about the rule has been put aside. For example, it covers mobile wallets when they store funds for prepaid products, so apps ranging from Apple Pay to Venmo may have to make some adjustments if they haven't already. "The biggest risk will come for fintechs who tried to pretend they're nonfinancial companies," Jackson told us last month.

In its essence, the CFPB's massive rule is a consumer-protection mandate whose basic anatomy may strike many in the payments business as familiar stuff. It extends protections for prepaid accounts under Regulation E, which implements the Electronic Funds Transfer Act, and under Regulation Z, which does the same for the Truth in Lending Act.

That's all to the good. But it's too bad it had to come to this, that it had to involve seven years of wrangling leading to the establishment of a complicated fiat of Dickensian girth. Did it really require all this blood, sweat, and tears to arrive at processes the industry might have come up with of its own accord, perhaps with a bit of nudging from consumers and, yes, a lighter-handed regulator?

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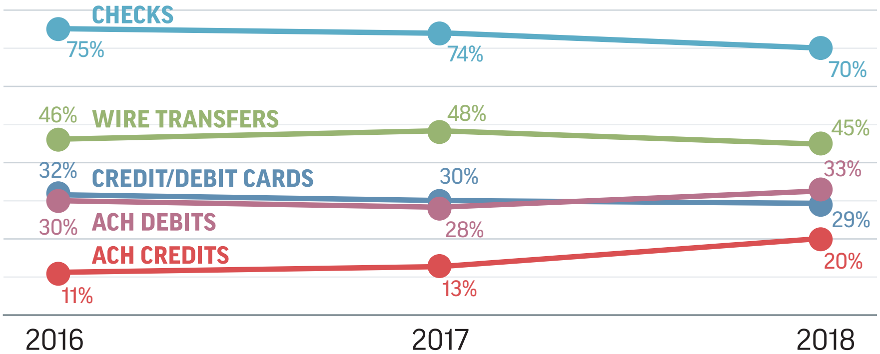
A SURPRISING JUMP IN ACH FRAUD

WHICH PAYMENT METHOD holds the dubious distinction of racking up the fastest growth in fraud last year?

According to the latest annual fraud report from the Association for Financial Professionals, it's debits and credits on the automated clearing house network. In fact, the ACH was the only payment method examined in the report that registered an increase in fraud in 2018.

HOW FRAUD WENT UP—AND DOWN

(Percentage of organizations reporting attempted or actual fraud)



Source: Association for Financial Professionals

Some 33% of responding organizations said they had been the victims of actual or attempted fraud on ACH debits last year, up from 28% in 2017. Meanwhile, 20% reported being the targets of ACH credit fraud, up markedly from 13%.

Surprised? So was Magnus Carlsson, manager for treasury and payments at the Bethesda, Md.-based AFP, a trade group for financial managers in a wide variety of industries. The ACH results were "probably the most stunning numbers we saw in this report," says Carlsson. Before releasing the study, Carlsson adds, "I went back to the research department and said, 'You have to double-check these numbers.'"

ACH credits and debits are two of five payment methods for which the AFP gathers fraud statistics from members and other contributing organizations. The others are checks, credit/debit cards, and wire transfers (chart).

Indeed, the near-ubiquity of ACH usage was enough to shove the overall portion of organizations absorbing attempted or actual payments fraud up to 82% from 78% in 2017.

Not that the jump in fraud on ACH credits should have been a complete surprise, says Carlsson. That number has been "creeping up," he notes. "I've been keeping my eye on that." Indeed, after holding steady at 11% in 2015 and 2016, the number climbed to 13% in 2017. But the big leap in 2018 was "much more than I expected," Carlsson says.

While some observers may note that the ACH network introduced same-day clearing for credits in September 2016 and for debits a year later, Carlsson says it's far from clear that the faster processing figures in the fraud increase. That's because isolating same-day transactions wasn't part of the study. A likely explanation for the higher fraud, he adds, lies in the popularity of ACH, along with wire transfers, for schemes like business email fraud, phishing fraud, and account takeovers.

In fact, the AFP's report shows that 80% of organizations sustained a business email compromise in 2018, up from 64% as recently as 2015. In these schemes, fraudsters dress up emails to mimic those of a finance manager or supervisor to gull underlings into releasing funds, often on the pretext of a bogus emergency.

Also, despite the sharp rise in 2018, ACH fraud is still relatively in check, points out NACHA, the network's governing body. "ACH fraud remains low on an absolute basis, and low in relation to other payment methods," says Victoria Day, NACHA's senior director and group manager, in an email statement.

The AFP fraud survey, which is now in its 15th year, was fielded in January and drew responses from 417 members and 200 prospective members. Respondents work in a wide array of industries, including retailing, manufacturing, health care, and hospitality. JPMorgan Chase & Co. sponsored the research for the study, entitled "Payments Fraud And Control Survey Report."

–John Stewart

HOW APPLE CARD PUSHES DIGITAL AUTHENTICATION—AND APPLE PAY

Apple Inc.'s new Apple Card is another push from the computing giant to move payments into a digital realm under Apple's control, according to analysts.

Apple last month announced the card, which bears a Mastercard Inc. brand and will be issued by Goldman Sachs Group Inc. The product, which eschews a card-verification code and expiration date on the physical card but includes them in Apple Wallet, is expected to debut this summer.

The physical card, made of titanium, contains a contact chip. For contactless transactions, Apple wants cardholders to use Apple Pay, its near-field communication-enabled mobile-payment service.

Apple Card is viewed by some, like cardmaker Gemalto, which was acquired in April by Thales Group, as an accelerant for digital payments in e-commerce. Apple Card users will make online purchases using Apple Pay, which is only available in Apple's Safari browser, and in-app.

Gemalto, in a blog post, said while many Apple Card users may still need to use another credit or debit card for some e-commerce purchases, the Apple Card is a push for online digital payments.

"Apple Card is a step in the right direction from a data-security standpoint," Jordan McKee, research director at New York City-based 451 Research, says in an email. "The go-forward goal of the industry should be to eliminate the usage and visibility of sensitive data wherever possible."

Though making an e-commerce purchase with the Apple Card on a non-Apple Pay-enabled Web site may be awkward, cardholders will be able to view the card-verification value and expiration date within Apple Wallet, McKee says. "Admittedly, it is a somewhat cumbersome and unnatural process for users, but does help to elevate security."

The Apple Card may be in the vanguard of this shift. While the card garners much attention, it is but one card in a pool of thousands issued by banks and credit unions.

"Apple and Goldman Sachs are targeting a specific demographic of consumers who are loyal to the Apple brand and use their mobile devices (phones and tablets) more than browser-based activity," says Krista Tedder, director of payments at Pleasanton, Calif.-based Javelin Strategy & Research, in an email message.

Her firm estimates that 22% of mobile-payment users (regardless of device brand) use mobile payments both in-store and online/in-app.

The reliance on Apple Wallet to house confidential payment information for the card won't change how payment data will be processed and stored for transactions, Tedder says.

"What will change is the approach used to authenticate the payment, store the credentials for subsequent usage, and how the consumer can access the information," she says. "Leveraging Apple Pay or other stored-credential applications which require additional authentication, such as device fingerprinting, biometrics, or other tools, meets multi-factor-authentication guidance that the industry is moving towards."

The Apple Card: A "confusing" message about NFC?

The lack of a contactless antenna on the physical card also illustrates Apple's ambition to showcase Apple Pay, McKee says.

"The end goal of Apple Card is to drive Apple Pay usage, which is why Apple has eschewed issuing a dual-interface card," he says. "The physical Apple Card is effectively being treated as a fallback mechanism for where Apple Pay is not accepted. Apple is aiming to guide cardholders' hands to Apple Pay wherever possible."

But it may be a confusing message for NFC, Tedder says. "Apple and Goldman Sachs are providing a mixed message—trust NFC if it is on your phone but not on a plastic," she says. "Consumers need to be advised that NFC is secure in both mobile wallets and physical cards.

"What is important is the additional authentication which comes with the EMV/NFC combination in the card or the use of NFC/biometrics on the device," Tedder continues. "Apple and Goldman are missing an opportunity to embrace payment technology to meet consumer needs to pay in the most secure fashion regardless of where they shop."

—Kevin Woodward

MONTHLY MERCHANT METRIC

Q4 2018 Account Attrition And Growth

Account Attrition:
Total attrited accounts in given period divided by total portfolio active accounts from same period of the prior year.

New Accounts Added:
Total new accounts in given period divided by total portfolio accounts from same period of the prior year.

Beginning	Account Attrition	New Accounts	Ending
100.0%	-23.3%	+25.7%	102.4%

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

Payments Experts. Powerful Data. THE STRAWHECKER GROUP

HOW AN IPO EXPOSES AN UBER MERCHANT

Granted, Uber Technologies Inc. doesn't say a lot about its payment strategy in the registration statement it issued last month ahead of its highly anticipated initial public offering of stock. But the filing does reveal the ride-share leader is an enormous generator of payment card volume and card-acceptance fees.

The statement says 87% of Uber's $49.8 billion in gross bookings last year were on credit or debit cards. That translates into $43.5 billion in card volume. Uber defines gross bookings as the total dollar value, including taxes, tolls and fees, of its ride-sharing, dockless-bike and scooter rentals, Uber Eats restaurant deliveries, and freight services.

Gross bookings rose 45% last year from 2017's $34.4 billion, which in turn were 79% higher than 2016's $19.2 billion. Uber customers usually book their services through Uber's mobile app.

San Francisco-based Uber says it paid $749 million in credit card processing fees in 2017, up 62% from $461 million in 2016. The filing, however, does not state how much Uber paid to accept cards in 2018. But if card-acceptance costs grew only 33%, well below the gross-bookings growth rate, they would have hit $1 billion (chart).

1. Digital Transactions estimate. Source: Uber

The filing doesn't name the company's payment processors, but it does note that Uber accepts PayPal Holdings Inc.'s Venmo peer-to-peer payment service. It's also known that Uber became a client of e-commerce merchant processor Braintree, now part of PayPal, in 2011. Online merchant processors Stripe and Adyen also count Uber as a client.

In a section of the filing about payment technologies, Uber says "because we integrated payments into our technology stack, we can continuously innovate to meet the needs of platform users." It notes drivers can be paid weekly or immediately through its Instant Pay service, which enables them to cash out their earnings up to five times a day in some markets. (That service is provided by Green Dot Corp.'s Green Dot Bank.)

The filing further says the Uber Cash service, which debuted last September, is a closed-loop digital wallet for payment of ride-sharing, bike or scooter rentals, and Uber Eats charges, and it can store credits and rewards. The document also notes that Uber accepts cash in some markets.

Online-payments researcher Thad Peterson, a senior analyst at Boston-based Aite Group LLC, points out that Uber explicitly states payments are incorporated into its "technology stack" and are not just an add-on.

"While this might be obvious given the seamless integration of payments into the customer journey, it's notable as an example of the strategic value of payments within their platform and worthy of emulation by other organizations, regardless of vertical," Peterson says.

Plus, Uber Cash places Uber "ahead of the curve on supporting individuals who either are unable to use a payment card or choose not to use a payment card," Peterson says. "This positions them well as the public and political concern around cashless payment models increases." (Amazon.com Inc. announced last month it would begin accepting cash in its Amazon Go stores).

Uber reported it processed 1.5 billion trips on its platform in 2018's fourth quarter and that it had 3.9 million registered drivers. Drivers have earned $78.2 billion since 2015, plus $1.2 billion in tips since Uber added in-app tipping in July 2017.

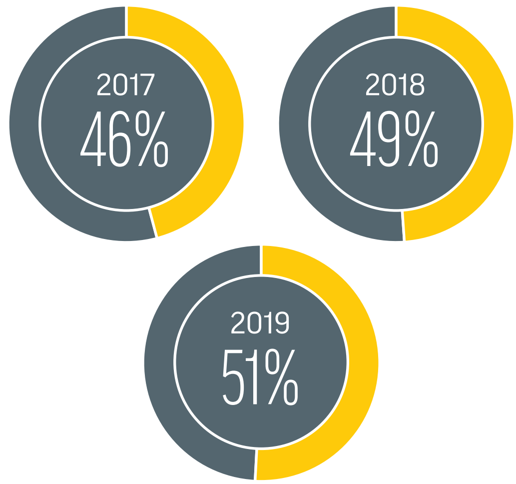
Uber as of mid-April had not stated how much it expects to raise from the IPO, or when it will happen. Should the IPO go through as planned, Uber will join rival Lyft Inc. as a publicly traded ride-share provider.

—Jim Daly

BANKS CHECK THEIR MOBILE-CAPTURE FEARS

LIFTING THE LIMIT

(Percentage of responding FIs with RDC limits in the $2,001 to $5,000 range)



Note: 105 respondents.

Source: Remotedepositcapture.com

Ten years after remote deposit capture became a commercial proposition, banks that offer the service are progressively allowing customers to deposit larger and larger sums.

Indeed, as of March, slightly more than half are applying per-item limits somewhere between $2,001 and $5,000, compared to 46% in March 2017, according to a new poll of 105 institutions by RemoteDepositCapture.com, an Alpharetta, Ga.-based research firm (chart).

And while 74% of institutions cap their per-item limits at $5,000 or less, some 19% now have limits above $10,000, have limits customized for each mobile depositor, or have no limit at all, says John Leekley, chief executive and founder at RemoteDepositCapture. "That number continues to grow," he says.

With RDC, consumers can deposit checks by snapping pictures of them with their smart phones and using technology built into their banking app to send the images. Ever since the option became commercially available, banks have sought to control the risk of bad or fake items by imposing dollar limits.

These limits are sometimes applied monthly but per-item caps are more common, according to Leekley. "They're just being cautious, it's the prudent thing to," he says.

But the experience so far has confounded the original expectations of how the risk of loss would play out, leading more institutions to loosen up, Leekley adds. "People thought it would be doomsday, but checks are the only payment type where fraud losses have gone down," he says.

In fact, Leekley feels banks should be bolder than they are, especially as authentication technologies like fingerprint recognition become more common on phones. "The thing that surprises me is that [limits] are still stuck this relatively low," he says. "I'm surprised these limits haven't increased more quickly. With biometrics, you can verify who's making a deposit. You can bounce [transactions] off various risk-management databases."

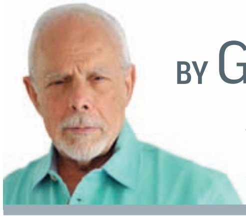
While banks may be reluctant to ditch per-item limits altogether (just 4% have done so, according to the latest poll), one trend now is to impose a limit that's tied to customer lists segmented by risk. Ultimately, this trend could progress even farther. "What we see is an evolution of taking limits to each customer, where every customer has a custom limit," Leekley says.

One thing that stands out in the research, Leekley adds, is that the more importance a bank places on RDC, the more likely it is to raise limits or experiment with custom limits. "You can tell which financial institutions have made mobile deposit a strategic priority and those that do it because they have to," he says. "Those that do it as a strategic priority have found out the risks are manageable."

High or low priority, RDC still accounts for a minority of check deposits compared to ATM or branch activity. Citing statistics from Mitek Systems Inc., a San Diego-based provider of RDC software, Leekley says 16% of all checks were deposited via RDC in the fourth quarter. "We're making progress, but there's still room for growth," he notes. DT

—John Stewart

DOUBLE ANONYMOUS (DIGITAL) PAYMENT



BY GIDEON SAMID
gideon@bitmint.com

MATERIALIZED CASH PROJECTS ITS OWN INTEGRITY, allowing two strangers to exchange value and never know who they are dealing with. This two-way anonymity endows cash traders with a sense of dignity, privacy, and freedom.

When money turned digital, this double anonymity was lost. So now, all your purchases are cataloged by a stranger. Every over-the-counter med you pick up, every book you select, even your choice of entertainment establishments. As a whole, this is tantamount to a strip search.

And then there are all those unbecoming situations, which a small sum of cash would have solved without an embarrassing trace. In addition, there are instances where payments are so small, or so fast, that anything beyond the sheer transfer of value is unwelcome friction.

Paying digital money happens through a flow of bits. The simplest way for this to happen is for these bits to carry value as part of their identity. Thus, when bits flow from A to B, value has been transferred, regardless of who A is or who B is, regardless of the lack of mutual awareness of the identities of A and B, and regardless of any other digital exchange from some remote digital centers or from other traders not part of this transaction. It is this subtle, but critical, fashion of payment that legacy digital money and cryptocurrencies fail to achieve.

A digital coin that represents its value via the bits that express it can also be tied to terms of redemption (it's called tethering—see my book, "Tethered Money"). Such a coin can be restricted for purchase of, say, food, can be valid until Thursday only, and can be spent only by George, regardless of who it is being paid to.

A pioneering stab towards this much-desired payment simplicity was undertaken by the Bank of Shanghai. Users download money from their account to their phone as a bunch of bits that have a value and an identity, fully expressed in that bit package. The user can choose between a "protected mode," where he surrenders his privacy, and a pure "cash mode," where the money is lost if the phone is stolen or crashes (unless it was backed up beforehand).

The fused value and identity bit package can be autonomously split by the user's phone, so as to pay any amount up to the total sum. No Internet needed, no validation by neighboring traders. For example, the app will represent the bits as a quick-response code on the payer's screen. The payer will then position the screen in front of the camera of the phone of the payee. Once captured, it's done.

Notice that for this transaction to take place, the payer does not need to know who he is paying to, and the payee may be ignorant as to who pays him. If the payee then handed a sandwich to the payer, we would have an exact functional replica of the old-fashioned cash transaction.

These Bank of Shanghai BitMint coins are downloaded to a well-identified first owner, and are redeemed to a well-identified last owner. What about the in-between owners? The bank decides. For small denominations, the temporary owners of the coins may remain anonymous. For larger sums, the full chain of custody of a coin may be required, and its presence is a condition of redemption.

In a business-to-business environment, the requirements are the opposite. You need a receipt for every payment. Here again, the advantage of tight packaging of value plus identity allows the payee to hash the received coin and return the hash to the payer as proof of payment. DT

LET'S MAKE A DEAL

The gravitational pull toward M&A is claiming some of the industry's biggest merchant processors. Are more mega-deals inevitable?

BY JOHN STEWART

THERE'S NOTHING NEW about mergers and acquisitions in the merchant-processing business. These combinations have been going on for years, after all, as acquirers seek to penetrate new markets or bulk up for economies of scale. But nowadays that urge is commanding bigger numbers than ever. And lately it has been mashing up processing giants with big-name buyers that come from outside the industry.

Just since January, the payments industry has witnessed the announcements of deals in which Fiserv Inc. proposes to buy First Data Corp. for $22 billion ("Fiserv's Big Bite," March) and Fidelity National Information Services Inc. (FIS) looks to snap up Worldpay Inc. for nearly twice that sum ("The Payments M&A Party Just Got Wilder," April).

These aren't, to say the least, penny-ante propositions. And most experts say the big-time dealmaking is far from over. "This is a trend," says Jared Drieling, senior director of business intelligence at The Strawhecker Group, an Omaha, Neb.-based payments consultancy. "There will be more mega-deals."

IN WITH INNOVATION

The big questions are: What's driving the trend, who will be buying, and who will be selling? The big driver is the insatiable appetite for growth—or "scale," as the chiefs in charge of these companies put it. Scale, as they see it, cures many ills, unlocks geysers of new profit, and makes possible the crucial innovation that the payments business has come to depend on.

"Worldpay brings large-scale capability. It accelerates our organic growth trajectory on day one," said Gary Norcross, FIS's chief executive, on the day his company announced its agreement to lay out $43 billion to buy Cincinnati-based Worldpay, the country's second-biggest merchant processor (chart, page 16). "We want to make sure we have scale to compete not only now but in the future."

But this is not a push for bigness for the sake of bigness. There

is method to the mad money. One of the biggest imperatives behind these combinations can be summed up in one word: innovation. And much of that these days is coming from relative newcomers.

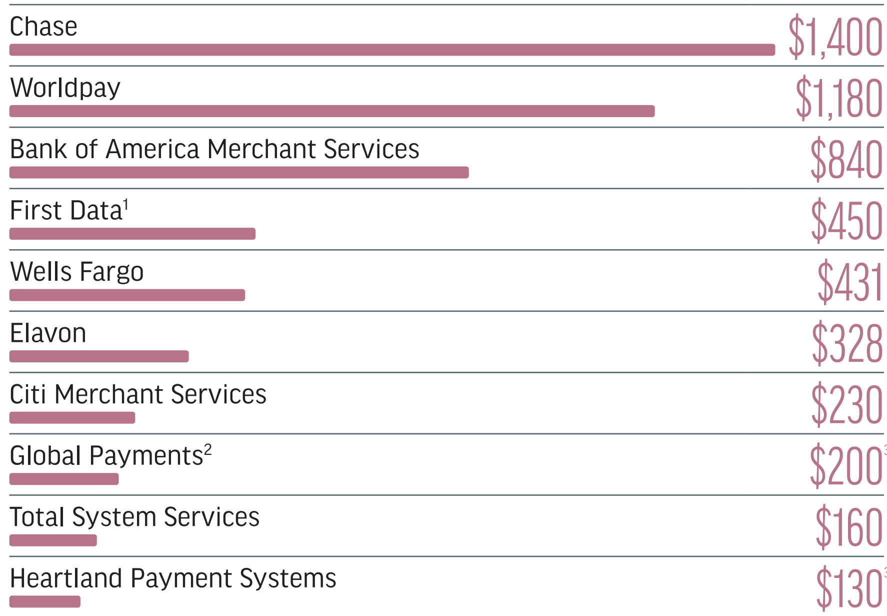
Square Inc., for example, emerged 10 years ago with a simple card-reading dongle that flea-market sellers and food-truck managers could attach to a smart phone. Since then, it has added sleek new devices and funding options whose appeal has attracted more than 2 million merchants and launched the company to the threshold of the 10 largest processors in the country.

Meanwhile, other so-called fintechs like Adyen, Stripe, and Shopify emerged with technologies that won loyalty from merchants and plumbed new depths in e-commerce. While companies like these aren't yet threatening to break into the top 10, their fast growth has demonstrated the value of innovation, both in technology and in strategy, by focusing on markets neglected by the big providers. "First Data is a very large acquiring entity, but it opened the doors to the Squares of the world," says former First Data executive Drieling.

But not for long. When strategists saw how merchants were responding to Square, First Data in 2012 bought a Square rival called Clover. By last September, the company had shipped 1 million Clover devices, doubling the cumulative number in only two years. Now that fast-growing technology is on the cusp of belonging to Fiserv, which until this year operated chiefly in a business—core processing for banks—that couldn't be more removed from merchant acquiring.

AMERICA'S TOP 10

(Largest merchant processors by 2018 U.S. volume, in billions)



1. Excludes BluePay and CardConnect 2. Excludes Heartland and OpenEdge 3. *Digital Transactions* estimate
Source: The Strawhecker Group

'THE SECOND INNING'

Closely related to the imperative for innovation is the push into another rapidly growing market, that for integrated payments. Here, the major player is not so much the independent sales organization selling merchant services as the software developer offering to tie payments into business systems that might also track time and attendance or sales volumes.

These integrators, called independent software vendors or ISVs, have grown into a major component in the payments chain. And they've touched off a scramble to control payments integration via acquisition.

Both First Data and Worldpay, formerly known as Vantiv, have hoovered up ISVs over the past few years, and now, assuming the deals go through, Fiserv and FIS will be the beneficiaries.

"Payments is being integrated, and it's not going to stop. It's probably only in the second inning," notes Robert Carr, chief executive of payments provider Go Beyond and formerly the CEO of Heartland Payment Systems Inc., a processor acquired by Global Payments Inc. in 2016 for approximately $4.3 billion.

Again, the imperative is for growth. ISVs, says Carr, "are going to be attractive to these big companies that have trouble growing." ISVs also bring value to payments that businesses are willing to pay for, fattening transaction margins, says Carr.

IMMEDIATE CREDIBILITY

Other factors could play a role in further M&A activity, and not just among the biggest firms. Besides top-down acquisitions, smaller players may be ready to post for-sale signs, hoping to attract larger would-be buyers.

"We're seeing a lot of interest from small ISOs seeking out a larger home," notes O.B. Rawls, president of

Payment Processing North America for Paysafe Group, a top 15 processor and the largest privately held one.

Companies like Paysafe can provide sales technology and feed leads to ISO operations once they're in-house. And the benefit to the buyer? Again, that "S" word surfaces. "Scale is more important than ever before," says Rawls. "And it's important for us at Paysafe to capture more scale."

The company knows firsthand the value of the kind of instant growth mergers can bring. It is itself the result of acquisitions, including that of Merchants' Choice in 2017 and iPayment Inc., Rawls's former company, last year.

Factors external to the industry may also help fuel more M&A, observers point out. Take the Federal Reserve's decision earlier this year to refrain from further interest-rate hikes. That decision brings some certainty to the cost of funds, and could be "very favorable for deals," says Raymond Pucci, director of merchant services at the Mercator Advisory Group, Maynard, Mass.

But while instant—and big-time—growth is a major factor behind at least some deals, observers differ on what purpose that growth serves. For companies like Fiserv and FIS, the mega-deals they've wrought bring them immediate credibility in an industry in which they have had little or no presence.

Bigger scale brings benefits in operating and cost efficiencies. And those efficiencies arrive fast. When the Worldpay acquisition is consummated, Jacksonville, Fla.-based FIS will see its revenue grow by 46% to $12.4 billion virtually overnight.

THE 'FOURTH LEG'

Still, observers differ on whether scale will help combat what some perceive as downward forces on revenue as savvier merchants negotiate harder for deals. The reason is that they differ on whether such pressure exists in the first place, at least for the larger firms. "Overall, there's pressure on fees," says Pucci. "Scale and volume is a way to mitigate when revenue comes under pressure."

To be sure, in theory, the incremental transaction should cost less to process than the preceding one, and that should help margins, not hurt them. But whether most big firms are at that point or not, they're simply charging plenty for their services, argues Carr.

"The idea that there's a race to zero is laughable," he says. "Margins per merchant account are higher than they've ever been. Merchants accept the increases in a surprisingly docile way."

Whether margin pressure is reality or myth, not all big processors are ready to be steamrollered into a merger. Many observers point to Total System Services Inc. (TSYS), a Columbus, Ga.-based processor of both merchant and consumer card accounts, as a strong candidate for the next deal, either as buyer or seller. The logic is that the deal, if nothing else, would be a defensive move in the wake of the year's two mega-mergers.

But the man who runs the company isn't buying that idea. "Our model has proven quite successful. We don't see a need for a fourth leg to our stool, and we don't see anything changing here," said M. Troy Woods, chairman, president, and CEO, during the Columbus, Ga.-based company's January earnings call, which came in the wake of the Fiserv-First Data announcement.

But that was before the other shoe dropped with the FIS-Worldpay deal. The industry will soon find out whether that fourth leg is forthcoming for TSYS—or for rivals now contemplating a significantly changed processing landscape. DT

FIELD GUIDE TO ALTERNATIVE PAYMENTS

Churn is still the overarching theme in a dynamic market dominated by mobile options and eyeing digital currency.

BY JOHN STEWART, JIM DALY, AND KEVIN WOODWARD

YOU CAN TELL A LOT ABOUT THE DYNAMISM OF A MARKET by how often its players turn over—how many new companies enter the market from year to year and how many fail or fade into the background. By this measure, digital payments is one of the most dynamic of markets. We noted last year that the churn had been such that just three entrants from our original guide in 2009 were still on the list. Those three are still here, but now, in this year's edition, we can note that four entries among the 34 that follow are entirely new to the guide.

Still, some overarching themes continue to hold true. We continue to see a heavy reliance on fully digital platforms aimed at mobile devices. A tipoff to this longstanding trend is the number of services using the "X Pay" formula as their naming convention. This year, that group includes two imports from China, Alipay and WeChat Pay, that are making major efforts to sign up U.S. merchants so users will have places to wield their wallets when they travel here.

Another trend worthy of note is the rising importance of digital currency. Crypto has had a rough year, but its wallet providers, exchanges, and trading platforms show remarkable persistence against considerable obstacles. You can see who's done what lately in this fascinating market in the entries for Bitcoin, Circle Internet Financial, Coinbase, Litecoin, and Ripple.

As in prior years, *Digital Transactions* generally defines an alternative-payment system as any network or consumer interface (a mobile app, for example) that displaces the Visa/MasterCard/AmEx/Discover networks (seen as one traditional system for this purpose), enables payments in a way that stands apart from that network (even if it ultimately uses it), 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 list 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
HQ: Pudong, Shanghai, China
Founded: 2004
Web: Global.Alipay.com

FIELD NOTES: Ant Financial's fabulously successful mobile-payments service is making a major play for U.S. merchants. The reason: It wants to cater to the 3 million Chinese tourists who visit the United States each year, spending more than $30 billion. Alipay also needs to find more markets outside China, where it and homegrown rival WcChat Pay have sewn up more than 90% of domestic mobile-payments volume. For now, Alipay claims more than 700 million active users who interact with merchants by scanning quick-response codes with their phones.

AMAZON PAY

Parent: Amazon.com Inc.
HQ: Seattle
Founded: 2007 (including predecessor services)
Web: Pay.Amazon.com

FIELD NOTES: Amazon Pay, which claims at least 33 million users, depends on the card credentials Amazon shoppers have stored with the massive online retailer over the years, some of whom are among the company's 100 million Prime members. Lately, Amazon Pay has been working to expand beyond pure e-commerce with eateries like TGI Fridays. Users can order ahead using the Amazon Pay feature in the Amazon app and show up later to pick up their meal. In the online realm, Amazon cut a deal in March with Worldpay, the nation's second-largest merchant processor, to handle acquiring and provide a gateway for Amazon Pay. That deal, which enlists Worldpay as Amazon Pay's first-ever acquirer, could grow even larger in importance with the pending $43-billion acquisition of Worldpay by Fidelity National Information Services Inc.

APPLE PAY

Parent: Apple Inc.
HQ: Cupertino, Calif.
Founded: 2014
Web: Apple.com/apple-pay/

FIELD NOTES: Apple Pay's position at the top of the mobile-payment pile is solid, though not for lack of effort by its competitors. Across the globe, 43% of iPhone users have enabled Apple Pay, says Loup Ventures, up from 36% in 2018. The big news, however, is the growing number of merchants that formerly resisted the near-field communication-based service. In early 2019, Apple said Target Corp., Taco Bell, and two regional chains would add Apple Pay acceptance at the point of sale. Target, formerly part of a failed merchant-led proprietary wallet called CurrentC, also added support for Samsung Pay and Google Pay. It also added support for contactless cards, which use the same NFC technology as Apple Pay. The volume of Apple Pay transactions exceeded 1.8 billion in Apple's fiscal first quarter ended Dec. 31, more than twice the volume from the year prior, the company said. Most recently, Apple announced the Apple Card, a cobranded credit card issued by Goldman Sachs Group Inc. The card takes a digital-first approach, with deep integration into Apple Wallet. The physical version of the card has a contact chip, but lacks a contactless antenna for POS transactions. Instead, it prompts cardholders to use the card in Apple Pay with their iPhones or Apple Watch.

BITCOIN

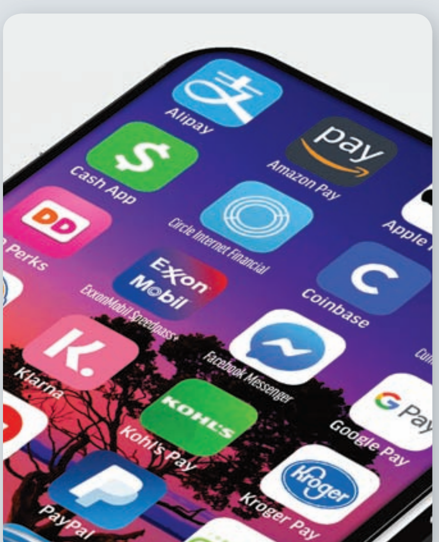
Parent: Satoshi Nakamoto
HQ: not applicable
Founded: 2009
Web: BitcoinFoundation.org
Pricing: Miners' transaction fees are volatile and paid by user

FIELD NOTES: What to make of Bitcoin? For years, the blockchain product has tantalized users and merchants alike with its promise of cheap, irrevocable, and fast transactions. But it remains a specialized currency with high volatility in both value and transaction cost—and with at times painfully slow transaction times. Still, Bitcoin remains tantalizing. Independent sales organizations are starting to figure out ways to sell it to merchants, and a new, off-chain channel shows promise in speeding up transactions. Will 2019 be a breakthrough year for Bitcoin? Much depends on whether it can shore up its position as both a store of value and a medium of exchange.

CASH APP

Parent: Square Inc.
HQ: San Francisco
Founded: 2012
Web: Cash.me

FIELD NOTES: Cash App, formerly Square Cash, is the Square Inc.'s person-to-person payments service. In one year, the number of Cash App users went from 7 million to 15 million. That's still well behind the 100 million consumers using the bank-controlled Zelle service, but the growth in Cash App is particularly gratifying for Square, as it plays into the company's emphasis on financial services for both consumers and merchants, Square executives said earlier this year. Cash App, which links to a Visa debit card to let users spend funds at merchants, competes with PayPal Holdings Inc.'s fast-growing Venmo service, in addition to Zelle, a bank-controlled P2P payments service. Spending on the Cash Card stood at $3 billion annualized as of the second quarter, the last period for which the company disclosed the statistic.



CIRCLE INTERNET FINANCIAL

Parent: Circle Internet Financial Ltd.
HQ: Boston
Founded: 2013
Web: Circle.com

FIELD NOTES: It's one of the quietest payments providers, yet Circle operates in one of the hottest fields in payments—peer-to-peer payments, both local and cross-border, with Circle Pay—as well as in the coming field of cryptocurrency. And last year it began giving voice to even bigger ambitions, including seeking a federal banking license. One of its latest moves, in March, was to launch a more powerful version of its trading app from Poloniex, a token exchange it acquired early last year.

COINBASE

Parent: Coinbase Inc.
HQ: San Francisco
Founded: 2012
Web: Coinbase.com
Pricing: Varies by region and purchase type; $100 Bitcoin purchase funded with U.S. bank account or Coinbase wallet costs $2.99 while credit or debit card funding would incur a fee of 3.99%.

FIELD NOTES: Often called the leading cryptocurrency exchange, Coinbase claims to have more than 20 million users and traded more than $150 billion in cryptocurrency. The company's growth has propelled it into the ranks of unicorns—approximately 300 privately held startups worldwide with a valuation of $1 billion or more. Investment tracker CB Insights pegged Coinbase at $1.6 billion in January. In March, Coinbase announced it now supports Ripple's XRP currency. And in April it introduced the Visa-branded Coinbase Card in the United Kingdom, a prepaid card that enables cardholders to spend using cryptocurrency, which is instantly converted to fiat currency to complete the purchase.

CUMBERLAND FARMS

Parent: Cumberland Farms Inc.
Headquarters: Westborough, Mass.
Founded: 2013
Web: CumberlandFarms.com/SmartPay

FIELD NOTES: Cumberland Farms, a convenience-store chain in the Northeast and Florida, offers biometric support for its SmartPay service, which is available for iOS and Android devices. SmartPay gives users a 10-cent discount per gallon of gas when they use it to pay for fuel. The app requires consumers to enroll a checking account as the payment method. The app—developed in-house by Cumberland Farms—uses automated clearing house payment technology from Portland, Maine-based ZipLine Inc. The biometric log-in feature for the updated app works with any iOS or Android smart phone that has a fingerprint sensor, or facial recognition, as with the iPhone X. To pay for fuel, the user verifies the store location and pump number within the app to activate the pump. In addition to paying less for fuel at one of the more than 600 Cumberland Farms locations in eight states, the app enables users to pay for in-store purchases, find a store location, track rewards progress, and view savings from using the app.

DD PERKS

Parent: Dunkin' Brands Group Inc.
HQ: Canton, Mass.
Founded: 2012
Web: DunkinDonuts.com/en/dd-perks

FIELD NOTES: Dunkin' Brands recently excised "Donuts" from its famous moniker in a move to expand the appeal of its coffee and other beverages. Its DD Perks loyalty program, however, marches on, ending 2018 with 9.8 million members, up 20% from 2017. While Dunkin's stores accept general-purpose mobile wallets that use near-field communication, a quick-response code-based payment feature remains a key ingredient of the DD Perks mobile app. Redesigned last year, the app facilitates easier in-app ordering and payments. Last month Dunkin' enabled customers using general-purpose payment cards, cash, and the major mobile wallets at more than 1,000 stores to earn DD Perks points provided that before paying, they present Dunkin's new plastic loyalty card or a QR code in the Dunkin' app that has their DD Perks ID. Dunkin' in April 2018 signed a multiyear license with its wallet provider to give it greater control over the technology running its mobile-ordering and payment platform.

EXXONMOBIL SPEEDPASS+

Parent: ExxonMobil Corp.
HQ: Irving, Texas
Founded: 2016
Web: Exxon.com/en/SpeedPass

FIELD NOTES: ExxonMobil's Speedpass+ app debuted as a smart-phone app that used mobile-payments services and credit and debit cards to make in-app payments for fuel at the pump. The app enables consumers to pay for fuel and other convenience-store products and services without dipping a card into a reader. It determines the consumer's location either via the global positioning system or barcode on the pump scanned by the consumer. Once a transaction is initiated, the consumer can authorize payment with a stored credit or debit card, or Apple Pay, if using an iPhone, or Samsung Pay, if using an Android smart phone. The app is not only a way to avoid dipping a card, and perhaps exposing it to a card-skimming device, but as a way to drive additional sales with prompts for offers in stores or a car wash. Speedpass+ had been part of the Plenti multimerchant loyalty program managed by American Express Co. until that ran out of gas in July 2018. ExxonMobil Rewards+ launched in its place.

FACEBOOK MESSENGER

Parent: Facebook Inc.
HQ: Menlo Park, Calif.
Founded: 2015
Web: Messenger.com

FIELD NOTES: Facebook's messaging app was one of the first to enable peer-to-peer payments in addition to conversations, and, with at least 1.3 billion users, it remains the largest and perhaps most useful such utility. It ran into headwinds last year, though, as a result of a scandal involving Facebook's sharing of user data with an outside entity. And the global growth rate for messaging apps in general is slowing. But Messenger has one big ace in the hole: It was the first social network to embrace chatbots, many of which crawl the network to enable payments as well as other functions.

GOOGLE PAY

Parent: Alphabet Inc.
HQ: Mountain View, Calif.
Founded: Android Pay, 2015;
Google Wallet, 2011
Web: Pay.Google.com

FIELD NOTES: After a series of rebrandings and service changes, the Google Pay as we know it today emerged last year as a one-stop shop for mobile point-of-sale and in-app merchant payments as well as person-to-person payments. Recent enhancements include a smoother process for moving from search to checkout, expansion to more countries, availability on Apple Inc.'s Safari browser as well as on desktops running the Chrome browser from chief Alphabet subsidiary Google, and the ability to hold transit passes. The eBay Inc. online marketplace, now in the process of completing its divorce from longtime preferred payments provider PayPal Holdings Inc., in March added Google Pay to its platform. EBay's customers who have the Google Pay digital wallet also will be able to complete purchases on desktops regardless of operating system or device. It remains to be seen whether these enhancements will improve Google Pay's market share versus general-purpose wallet rivals Samsung Pay and Apple Pay, all of which are still struggling for widespread consumer adoption.

GULF PAY

Parent: Gulf Oil LP
HQ: Wellesley Hills, Mass.
Founded: 2016
Web: GulfOil.com/Gulf-Pay

FIELD NOTES: Announced in early 2017, Gulf Pay is slowly rolling out in Gulf Oil's market. In addition to paying for fuel at the pump with a smart phone, Gulf Pay users will be able to locate Gulf stations, view actual fuel prices, obtain directions, and view offers for fuel and in-store products. Details of how payment transactions will process were not released. The app will be available for iOS and Android devices, according to a Gulf Oil Web site. Gulf Oil has more than 1,800 Gulf gas stations. The app is built on technology from P97 Networks Inc., a Houston-based petroleum-services company. Other companies using its technology include To Go Stores, a Puerto Rico-based convenience-store chain, Phillips 66, and JPMorgan Chase & Co.'s Chase Pay.

KLARNA

Parent: Klarna Bank AB
HQ: Stockholm
Founded: 2005
Web: Klarna.com

FIELD NOTES: Sweden's Klarna, known for its single-click purchasing utility and its willingness to delay payment until a customer receives the goods she ordered online, may now have its work cut out for it. Its point-of-sale credit market, especially in the United States, just got more competitive with rival Affirm's deal to make on-the-spot POS loans at Walmart stores. Still, privately held Klarna carries a lofty $2.5 billion valuation, and its U.S. merchant base keeps growing. It now stands at 100,000, up from 89,000 a year ago. Some 60 million consumers now use the product.

KOHL'S PAY

Parent: Kohl's Corp
HQ: Menomonee Falls, Wis.
Founded: 2016
Web: Kohls.com

FIELD NOTES: Kohl's may operate a department-store chain, but its emphasis with its mobile app is speed at checkout, and not just for payment. The app also allows customers to redeem offers, rewards in the chain's Yes2You program, and Kohl's Cash in one barcode-based flash. "When we say fast savings at checkout, we mean really fast," the company says on its Web site. The app's developer is Omnyway Inc., a 5-year-old startup cofounded by Bill Melton, well-known in the payments industry as a founder of point-of-sale terminal vendor VeriFone.

KROGER PAY

Parent: The Kroger Co.
HQ: Cincinnati
Founded: 2019
Web: Kroger.com/f/Kroger-Mobile-Pay-FAQs

FIELD NOTES: Like other traditional mid-market supermarket chains, the 2,800-store Kroger empire is under attack from challengers ranging from low- and higher-priced brick-and-mortar grocers as well as new online competitors. With some retailers having success with proprietary mobile wallets, it's no surprise that the newest arrow in Kroger's quiver is Kroger Pay, a mobile app that debuted earlier this year in Columbus, Ohio, with expansion elsewhere planned soon. The app, available for iOS and Android devices, uses QR codes for payments as Kroger does not accept NFC-based general-purpose mobile wallets such as Apple Pay or Google Pay. Kroger Pay is part of a multifaceted loyalty program dubbed "Rewards" that includes a debit card, digital coupons, and personalized offers. Consumers accrue loyalty points when using Kroger Pay and can receive additional points when the payment method is the Rewards debit card or a general-purpose prepaid card that also carries a Kroger store brand.

LITECOIN

Parent: Charlie Lee
HQ: Not applicable
Founded: 2011
Web: Litecoin-Foundation.org

FIELD NOTES: Litecoin is a cryptocurrency that was specifically conceived as an alternative way to pay merchants. Charlie Lee, the former Google and Coinbase engineer who invented Litecoin, predicts 90% of online and brick-and-mortar merchants will be accepting cryptocurrency within 10 years, and Litecoin will be leading that charge. The reason, he says, is that transactions on the Litecoin network are faster and cheaper in comparison to Bitcoin. He has a strong case. The median transaction fee for Litecoin as of mid-April was 2 cents, compared to category leader Bitcoin's 85 cents, according to Bitinfocharts.

MONEYGRAM.COM

Parent: MoneyGram International Inc.
HQ: Dallas
Founded: 2010
Web: MoneyGram.com
Pricing: $500 online transfer to Mexico—$4 if funded by checking account with cash pick-up; $6.99 if funded by Visa or Mastercard credit or debit card.

FIELD NOTES: Western Union rival MoneyGram offers money transfers online in 24 countries and through its mobile app in 15. New countries on MoneyGram's online platform include Australia, the Netherlands, Belgium, Portugal, and Austria. Online expansion is a key MoneyGram objective in the wake of China-based Ant Financial Services Group's failed attempt to buy the company in early 2018. In addition to its 350,000 agents and online and mobile options, MoneyGram says it is expanding its services through kiosks, ATMs, and direct-to-bank services. Walmart remains MoneyGram's biggest agent. In bill payments, MoneyGram in December said it would provide bill-pay services at more than 1,900 stores that are part of The Kroger Co.'s many grocery-store chains.

PAYPAL

Parent: PayPal Holdings Inc.
HQ: San Jose, Calif.
Founded: 1998
Web: PayPal.com
Pricing: 2.9% plus 30 cents per U.S. merchant transaction; for PayPal Here, 2.7% for swiped transactions, 3.5% plus 15 cents for manually entered transactions.

FIELD NOTES: If you just focus on the numbers, PayPal appears to be enjoying a golden age. Active accounts soared 17% last year to hit 267 million, and management's expectation is that number will reach an even 300 million by the end of 2019. Quarterly revenue exceeded $4 billion for the first time in the final period of 2018 on the strength of double-digit increases in both dollar volume and transactions. Peer-to-peer volume, adding up both Venmo activity and PayPal P2P, reached $139 billion last year, cementing PayPal's place in this hot market. Little wonder CEO Dan Schulman in January proclaimed the aspiration for PayPal to be the "de facto operating system for mobile and digital payments across the world." But there are a few clouds in these sunny skies. Venmo is still losing money, and threatens to lose more as volume builds, dragging down PayPal's take rate. Last year, just 29% of Venmo users performed a transaction PayPal could claim revenue on, mainly through in-store and online transactions. Meanwhile, former owner eBay Inc. is switching to Adyen for processing duty, demoting PayPal to just another payment method. While eBay launched its so-called managed-payments platform in September, it waited seven months to add PayPal, whose five-year operating agreement with the big online marketplace ends next year. PayPal continues to be acquisitive, snapping up iZettle AB, a sort of European Square, and U.S payments provider Hyperwallet in 2018. And an agreement with bill-payment processor Paymentus promises to give PayPal entrée into an entirely new payments market.

PEOPLE PAY

Parent: Fidelity National Information Services Inc. (FIS)
HQ: Jacksonville, Fla.
Founded: 2013
Web: FISglobal.com

FIELD NOTES: People Pay is FIS's white-label person-to-person payment service. Financial institutions can apply their own brands and set pricing for the service. People Pay is built on the PayNet network FIS introduced in 2012 to offer real-time settlement for various non-card payments, and it also draws on FIS's NYCE electronic funds transfer switch that links thousands of financial institutions, including ones that aren't otherwise FIS clients. Users send payments through their bank's online-banking system using the recipient's email address or mobile-phone number. The recipient receives a text or email with instructions on how to retrieve the money. FIS also offers Zelle to financial institutions.

PHILLIPS 66

Parent: Phillips 66
HQ: Houston
Founded: 2016
Web: Phillips66.com

FIELD NOTES: Refinery operator and fuel retailer Phillips 66 announced a mobile-commerce-focused platform in 2017 based on the P97 PetroZone m-commerce service Phillips announced in 2016. In early 2019, Phillips 66 said paying for fuel at one of its stations will be integrated into a dashboard-commerce system under development with Honda Developer Studio. The new arrangement is expected to work at stations flagged under the Houston-based petroleum company's three brands, which in the United States include 76 and Conoco as well as Phillips 66. Some 7,550 independently owned outlets in 48 states sell the company's products. The company also said it will continue rolling out its My Phillips 66 mobile app, which launched last year and works in-store as well as at the pump with both Apple and Google devices. The app integrates Mastercard Inc.'s Masterpass wallet, which allows consumers to pay at the pump or in-store at Phillips 66 stations. It added Visa Checkout late in 2018 to the app.

POPMONEY

Parent: Fiserv Inc.
HQ: Brookfield, Wis.
Founded: 2009
Web: Popmoney.com

FIELD NOTES: Fiserv acquired Popmoney in 2011, but now the person-to-person payments arena is changing, and Fiserv is changing with it. Zelle, a bank-owned P2P service, began national advertisements in January. Fiserv signed more than 100 clients for Zelle in 2018's fourth quarter, a number that exceeded the total of the previous three periods. Fiserv has offered Zelle to financial institutions since 2016. All told, the company's Zelle volume was up by a factor of six for the year, Jeffery Yabuki, Fiserv chief executive, said without citing specifics. "We continue to see strong demand around Zelle," he added. Total P2P transactions, including Popmoney, grew 44% last year, he added.

QWICK CODES

Parent: MagTek Inc.
HQ: Seal Beach, Calif.
Founded: 2012
Web: QwickCodes.com
Pricing: $49.99 annual subscription

FIELD NOTES: Qwick Codes rely on MagTek's Magne-Safe security architecture to generate one-time transaction codes consumers can use in place of actual payment cards in stores, online, and at ATMs. Users add cards to the Qwick Codes wallet by swiping them with a reader supplied by MagTek. The wallet can also keep transaction parameters such as dollar limits, where the code can be used, and an expiration date, and users can revoke the code at any time. To use the code at the point of sale, the user scans a barcode generated on his smart phone screen. At ATMs or online, he enters the 8-digit code.

RIA MONEY TRANSFER

Parent: Euronet Worldwide Inc.
HQ: Leawood, Kan.
Founded: 1987
Web: RiaMoneyTransfer.com
Pricing: $500 U.S. to Mexico online transfer—$1 if funded with bank account, $4 with debit card, $10 with credit card.

FIELD NOTES: Ria continues to be Walmart Inc.'s domestic in-store money-transfer provider, and it and Euronet's other money-transfer brands handled 107.6 million transactions last year, up 17% from 92.2 million in 2017. The value of the transfers was $49.7 billion. Ria had 355,000 agents globally as of September 2018. In August, Xoom, PayPal Holdings Inc.'s online money-transfer service, announced a deal with Ria that will bring Xoom into a number of new countries, the largest of which is Russia. Under the arrangement, Xoom payment recipients are to pick up cash transfers from senders, most of whom are in the U.S., at 150,000 Ria locations.

RIPPLE

Parent: Ripple Labs Inc.
HQ: San Francisco
Founded: 2012
Web: ripple.com

FIELD NOTES: Ripple, provider of the XRP digital currency, the RippleNet payment network, and blockchain-based technology, has been working to bring its services to financial institutions for use in various niches, including cross-border payments that traditionally have been costly for businesses. Nearly

100 institutions joined RippleNet last year; the network now has more than 200 customers and operates in about 40 countries. Ripple's xRapid cross-border service, which uses XRP and depends on exchanges to translate transactions into fiat currencies, recently earned a shout-out from The World Bank. In a March blog post, the bank noted that financial institutions participating in a 2018 test of the service in the U.S.-Mexico payment corridor saved 40% to 70% in foreign-exchange costs, with average payment times of just over two minutes. Last August Ripple announced three cryptocurrency exchanges would work with xRapid.

SAMSUNG PAY

Parent: Samsung Electronics Co. Ltd.
HQ: Seoul, South Korea
Founded: 2015
Web: Samsung.com/Samsung-Pay/

FIELD NOTES: Samsung Pay can connect to point-of-sale terminals via near-field communication. But, unlike Apple Pay and another NFC-based competitor, Google Pay, Samsung Pay also enables Samsung's Android phones to link to the POS via a technology called magnetic secure transmission (MST), which means it works with just about any mag-stripe reader in the market. In 2018, Samsung said the service worked with approximately 2,000 financial institutions spread across 24 geographical markets. Samsung did not release a user count but said the service has processed 1.3 billion transactions since its launch. The company cites such features as Samsung Rewards and ATM transaction capability, both of which are available in the U.S. market, where Samsung Pay launched a few weeks after the August 2015 launch in South Korea.

SKRILL

Parent: Paysafe Group Ltd.
HQ: London
Founded: 2001
Web: Skrill.com

FIELD NOTES: Originally focused on online-gaming transactions, Skrill, now part of the sprawling Paysafe empire, offers a variety of payment services for consumers and businesses, including money transfers to bank accounts and mobile wallets, and an online wallet. Last July, the Skrill Send Direct money-transfer service debuted in another nine countries, including India, bringing its total to 45. Skrill also enabled its wallet users to buy and sell cryptocurrencies, including Bitcoin, Bitcoin Cash, Ether and Litecoin, using any one of the 40-plus fiat currencies available in the wallet.

STARBUCKS REWARDS

Parent: Starbucks Corp.
HQ: Seattle
Founded: 2011
Web: Starbucks.com/promo/rewards

FIELD NOTES: The Starbucks Rewards loyalty program is built around a proprietary prepaid card and mobile app that facilities bar-code payments, supplemented by Visa prepaid and credit cards issued by JPMorgan Chase & Co. Starbucks Rewards claimed 16.3 million active U.S. members at the end of 2018, up 14% year-over-year. Reward members drive 40% of U.S. tender, and the mobile order-and-pay service represented 14% of transactions in fiscal 2018's fourth quarter. In March, Starbucks announced program changes to enable customers to earn and redeem their "Stars" faster. Anything the loyalty program can do to spur revenues will be appreciated by Starbucks' top brass as the heady days of growth in the U.S., which now has more than 17,000 stores, appear to be over. U.S. comparable-store transaction growth was flat year-over-year in fiscal 2019's first quarter ended Dec. 30, 2018, though sales grew 4%.

TARGET WALLET

Parent: Target Corp.
HQ: Minneapolis
Founded: 2017
Web: Target.com

FIELD NOTES: Target's Wallet, created in late 2017, resides within the discount retailer's mobile app and includes electronic coupons stored in the app's Cartwheel section, formerly a separate app. Target early this year announced it would accept Apple Pay, Google Pay, and Samsung Pay, as well as contactless cards, but its preferred payment choice is its family of Redcards—a private-label credit card and Mastercard cobranded credit card issued by TD Bank, and a proprietary debit card. The Redcards can be loaded into the wallet and used for payments and coupon redemptions in one scan at Target stores. Redcards, which account for about 24% of Target sales, give the cardholder a 5% discount on Target purchases.

VENMO

Parent: PayPal Holdings Inc.
HQ: San Jose, Calif.
Founded: 2009
Web: Venmo.com
Pricing: Free

FIELD NOTES: Last year, we said PayPal's peer-to-peer payment app Venmo just keeps sizzling, and in 2018 it did just that. It ended the year with $62 billion in volume, a 77% increase over 2017 as it worked to keep pace with Zelle, the increasingly popular P2P payments app from some of the nation's biggest banks. Much of Venmo's popularity stems from the fact that, unlike most P2P apps, it includes a social-media overlay, allowing users to converse with each other as well as send or receive funds. But there are some dark clouds over Venmo. One has to do with its price, which is exactly zero. That wasn't much of a problem when its volume was smaller, but now all that free volume is helping to drag down PayPal's take rate, or how much it earns on each transaction. The solution is Pay With Venmo, a service that lets users buy things in stores and restaurants. With that service in place, some 29% of users performed what PayPal calls a "monetizable" transaction in 2018. That percentage clearly needs to go up. PayPal's CFO admitted in January Venmo was "not in the black yet." Help could be on the way. In April, the *Wall Street Journal* reported that PayPal was seeking an issuer for a cobranded Venmo credit card. That would earn discount fees and help the bottom line.

WALMART PAY

Parent: Walmart Inc.
HQ: Bentonville, Ark.
Founded: 2015
Web: Walmart.com/cp/Walmart-Pay/3205993

FIELD NOTES: The world's largest retailer completed the rollout of Walmart Pay, its QR-code-based mobile-payment service, in 2016. Part of Walmart's strategy with the service is to make it easy for consumers to use their Walmart-branded credit cards in the app. In 2018, Walmart made Walmart Pay an option for its order-online-in-store service. A shopper asks a store employee to order an item to ship to the store or the shopper's home. A receipt is generated by the employee app. The shopper then takes the receipt to any store register to pay. Despite the massive size of Walmart and its customer base, Walmart Pay is not as well liked as Apple Pay is by these consumers. New York City-based Auriemma Consulting Group found that Walmart shoppers who use Apple Pay and have a mobile-payment preference are twice as likely to choose Apple Pay over Walmart Pay. Mobile apps from other retailers—Target Corp.'s Wallet and Kohl's Corp.'s Kohl's Pay—also are less likely to be chosen over Apple Pay.

WECHAT PAY

Parent: Tencent Holdings Ltd.
HQ: Shenzhen, Guangdong, China
Founded: 2011
Web: Pay.Weixin.qq.com/index.php/public/wechatpay

FIELD NOTES: If you thought Alipay's 700 million active users was hard to top, look no further than the other Chinese mobile wallet, WeChat Pay, which claims fully 900 million active users. Like its rival Alipay, WeChat Pay is starting to look abroad, particularly at the United States, to cater to users who are increasingly traveling beyond China's borders. WeChat Pay is part of the Tencent empire, which integrates a number of popular digital services, including social media. And again like Alipay, it depends on quick-response codes rather than on near-field communication, the standard major U.S. wallets like Apple Pay and Google Pay have adopted. That makes WeChat Pay easy for merchants to install and appeals to China's huge population of smart-phone aficionados. How well QR codes will work in markets converting to NFC, like the U.S., will remain to be seen.

WESTERNUNION.COM

Parent: The Western Union Co.
HQ: Denver
Founded: 2012
Web: WesternUnion.com
Pricing: $500 U.S. to Mexico online transfer—$5 if funded with bank account, $7 with debit card, $9 with credit card.

FIELD NOTES: Western Union, the leading wire-transfer provider, faces a host of challengers competing for the online transfer market, which is spurring the company to increase its coverage. Westernunion.com is now available in more than 60 countries, with 20 new markets added last year. Westernunion.com consumer-to-consumer revenues increased 21% in 2018 over the year before on a constant-currency basis, and transactions rose 25%. Westernunion.com revenues represented 12% of $4.45 billion in total C2C revenues for the year. In March, Western Union said it would sell its Speedpay bill-payment subsidiary to ACI Worldwide Inc. for $750 million.

YOSEMITE X

Parent: Yosemite X Inc.
HQ: Palo Alto, Calif.
Founded: 2014
Web: YosemiteCardX.com

FIELD NOTES: Thirty-five merchants in the Silicon Valley area are accepting the new Yosemite Card, which caps acceptance fees at 0.3%. The private credit card can do that because it uses blockchain technology to manage transactions. Typical discount rates for network-branded credit cards range from 2% to 3% or more. Yosemite X Inc. launched the card in 2019. Once approved for a Yosemite Card credit line—that decision is made internally at Yosemite and not reported to credit bureaus—users download the Yosemite Card app for an iOS or Android device. Consumers pay no fees for the account. Neither credit score nor credit history is a factor in the credit applications, the company says. To make a transaction, the cardholder presents the Yosemite Card via the mobile app. A dynamic quick-response code is generated that is linked to their blockchain account. The merchant scans the code to complete the payment. Receipts are sent to the cardholder's mobile app. The card only works for face-to-face transactions, but Yosemite X expects to add e-commerce functionality eventually, along with a physical card. The card, which relies on the blockchain to track transactions, is expected to be available beyond the Silicon Valley area later this year. DT

WHERE EMV SPELLS HEADACHE

With almost 18 months to go, the petroleum industry is having a hard time with a crucial EMV deadline. Not many gas stations are expected to make it. Here's why.

BY **PETER LUCAS**

IT'S HALFTIME in the runup to the October 2020 deadline set by Visa Inc. and Mastercard Inc. for gas stations to install in-pump EMV card readers, and the latest line on whether the industry will reach full compliance, or only a portion will, is: pick 'em.

What's even more worrisome for Visa and Mastercard, which have already extended the petroleum industry's deadline for EMV compliance by three years, is this: If full compliance is not reached, handicappers refuse to predict what percentage of stations will be EMV-compliant come October next year.

The penalty for non-compliance is the same as it was for other retail businesses in the past: liability for chargebacks will shift to the out-of-compliance party.

Currently, about 30% of all gas stations in the United States are estimated to have EMV card readers, to be testing them, or to be starting to install, according to industry experts. Of that segment, just 1% to 2% are considered to be EMV-complete, or ready to go, says Cory Schlegel, director of product development for the Quantum Petro service at Jacksonville, Fla.-based payments-technology provider Sound Payments. The service provides a cloud-based EMV retrofit kit for fuel pumps.

That's a strong indicator a substantial portion of gas stations won't be even close to compliant by the deadline.

A TOUCHY SUBJECT

The glacial pace at which the industry is moving, even after the deadline extension, is attributable to myriad factors. Two of the biggest hurdles, according to industry experts, are cost and a paucity of certified EMV solutions.

Cost is a prickly subject, especially for independent station owners, who often have older pump technology and a limited IT budget. The average cost to make a single fuel pump, which typically has four nozzles, EMV-compliant ranges from $25,000 to $30,000.

That toll can jump as high as $40,000, depending on features station owners want to add, such as integrated loyalty, fleet card, and third-party marketing/discount programs, fuel-industry experts say. By comparison, a fuel-pump replacement with a bare-bones EMV card reader runs about $20,000.

With an average of four pumps per station, station owners are looking at $80,000 to $160,000 to upgrade, on average—more for larger fueling depots.

While station owners affiliated with major brands typically receive financial incentives from the oil companies for industry-mandated upgrades, mom-and-pop independents don't. That makes it harder for small-station owners who are not experiencing a lot of fraud to justify expensive pump upgrades, says Josh Smith, chief executive and founder of Gas Pos, a North Little Rock, Ark.-based provider of EMV retrofit kits for fuel pumps.

With gas margins at their lowest level in years, around 2 cents per gallon, it can take a decade or longer for small-station operators to recoup their return on investment, Smith says.

Another overlooked cost factor comes into play if a station must break ground to remove the pump, which opens a big can of worms.

"Once ground is broken, there is environmental testing and other building codes to comply with, and that gets costly," says Sound Payments' Schlegel. "If a station owner has to replace his fuel-storage tanks after breaking ground, it could run millions of dollars."

Such unanticipated costs could put station owners out of business, industry experts say.

'Electronics tend to fail before the pump hydraulics … replace the entire pump because it costs the same as replacing the electronics.'

—STEVE O'TOOLE, VICE PRESIDENT FOR CONVENIENCE AND RETAIL SALES, NCR

Another big issue is that many payments processors are still testing their in-pump EMV software prior to certification. Currently, there is only one commercially available EMV application for in-pump cards, with a few more in the beta phase, says Schlegel.

Why so few? The problem is attributable to the welter of applications for payments processing in the petroleum industry. Processors have different applications for specific oil company brands, pump manufacturers, makers of in-pump card readers and PIN pads, connections to back-office networks, and combinations of all of the above. The result: a bottleneck in bringing solutions to market.

"There just aren't certified solutions available for every combination of equipment at this point," says Linda Toth, director of standards for Alexandria, Va.-based Conexxus Inc., a technology standards body for convenience stores.

Indeed, NCR Corp., which makes in-pump card-reader hardware and applications, says its work with pump manufacturers and processors has resulted in 27 different applications that must be certified.

"The sheer number of configurations requires a lot of certifications," says Paul Kern, product management director, payment services for NCR.

Once a processor has developed its application, pump makers must certify it to ensure compatibility with their electronic payment system, which connects the pump to the processor. Next, major oil companies must certify the application for their affiliates, as in-pump card transactions will run over their networks to a processor.

STANDING PAT

While all the involved parties are reportedly talking with one another, the parley has not, so far at least, sped development of in-pump EMV solutions.

"Even though we are working with processors, we don't drive their schedule," says Russ Haecker, EMV business leader for Austin, Texas-based Dover Fueling Solutions. "Solutions are being developed and tested, and I expect we will see some announcements about readiness in the coming months, but a lot of station owners aren't inclined to start moving forward until they know for certain there is a ready-to-go solution."

Indeed, many independent, multiple-station owners have a hodgepodge of fuel pumps and back-office systems across their locations. That makes it harder for them to upgrade to EMV if they are looking to standardize in-pump POS equipment and a generic EMV solution is not available.

Other complications: a shortage of certified technicians to install EMV card readers and the need to shut down pumps for a day or longer to install new card readers, which costs sales.

Add it all up and it's a pretty messy situation, according to Smith of Gas Pos. "The mandate to install EMV is well-intentioned, but unlike in brick-and-mortar retail, there are so many endpoints with outdoor card readers that have to be tied together. It's prompted a lot of station owners to stand pat until there is more clarity," he says.

Some fuel-industry executives argue the logjam will break later this year as more processors get their solutions tested and certified. That should pave the way for the major brands to begin upgrading their stations in earnest, says Haecker.

'HOTBEDS OF FRAUD'

But just how far along processors are in developing in-pump EMV solutions is uncertain. The same is true for POS terminal makers.

First Data Corp., one of the largest merchant processors, did not respond to requests for an interview. POS terminal makers Ingenico and Verifone declined interview requests.

Verifone did say, however, it is working closely with all North American dispenser manufacturers to meet the EMV technical requirements ahead of the October 2020 deadline. Visa and Mastercard did not respond to interview requests.

The best bet on which stations will be EMV-ready at deadline? Those affiliated either with a major oil company or convenience-store brand. Both kinds have a strong motivation to be sure their stations are EMV-compliant and soon. Failure risks making their stations magnets for fraud, experts say.

More than 50% of the top 200 oil-company retailers have installed in-pump EMV hardware, says Eric Bagden, director, retail solutions, for Gilbarco Veeder-Root, a Greensboro, N.C-based provider of fuel dispensers and convenience-store technology.

On the c-store side, Speedway, for example, has rolled out EMV at all its locations, but not yet turned it on, says NCR's Kern.

Independent station owners moving to meet next year's deadline tend to be in geographic areas, such as Florida, where gas stations are prone to fraud, says Kern. The fraud stems from card skimming at the pump as well as stolen cards.

This trend has raised concerns that independent station owners in areas less prone to fraud may be more willing to gamble by delaying EMV implementation.

"A lot of independent station owners look at the average cost of chargebacks for the petroleum industry and apply it to their business without understanding that there are hotbeds of fraud in the industry," says Haecker of Dover Fueling Systems. "If they are non-EMV-compliant after the deadline, they will be painting targets on their backs."

What independent station owners currently experiencing low fraud rates tend to overlook is that criminals can resell gasoline just as easily as fraudulently purchased hard goods, petroleum industry experts say.

ANYONE'S GUESS

One option that may spark higher adoption of EMV card readers is retrofit kits, which cost a fraction of replacing the entire pump.

"Electronics tend to fail before the pump hydraulics, and when that happens the prevailing thought is to replace the entire pump because it costs the same as replacing the electronics," which includes screen, card reader, and PIN pad, says Steve O'Toole, vice president for convenience and retail sales at NCR.

While a straight EMV card-reader retrofit can cost about 50% of the cost of a compliant pump replacement, according to petroleum-industry experts, the larger question is whether existing bottlenecks can be resolved in time to prevent an 11th-hour rush before the 2020 deadline. In such a rush, the shortage of technicians would become more acute, experts say.

Nor should anyone bet on getting more time. With Visa and Mastercard granting one deadline extension, another is not expected. "There's no indication an extension is necessary or that one is coming," says Randy Vanderhoof, director of Princeton Junction, N.J.-based U.S. Payments Forum.

A related question is whether non-compliant station owners can expect strict enforcement of chargeback penalties for non-compliance once the deadline passes, or at least a brief grace period.

Right now, that's anyone's guess. DT


DIGITAL TRANSACTIONS
News

DEBIT DYNAMICS

The Fed's latest probe into debit card costs and revenues has merchants clamoring for lower regulated interchange.

BY JIM DALY

MERCHANTS HAVE SAID IT BEFORE, and they're saying it again: It's high time the Federal Reserve lowers its regulated debit card interchange rate.

The call by the Retail Industry Leaders Association came shortly after the Fed in March released its latest study of debit card revenues and expenses. The study, for the year 2017, says regulated debit card issuers' authorization, clearing, and settlement (ACS) costs had declined 54% since 2009, the first year the Fed began collecting such data.

The ACS finding was just one factoid in a study that gives a fascinating look into the dynamics of the debit world, where regulated issuers' cards tallied 43.2 billion, or 63%, of the 68.5 billion debit and prepaid card purchase transactions tracked by the Fed (chart, page 36). Debit card transactions generated $20.7 billion in interchange paid by merchant acquirers to issuers in 2017, an expense passed on to merchants (chart).

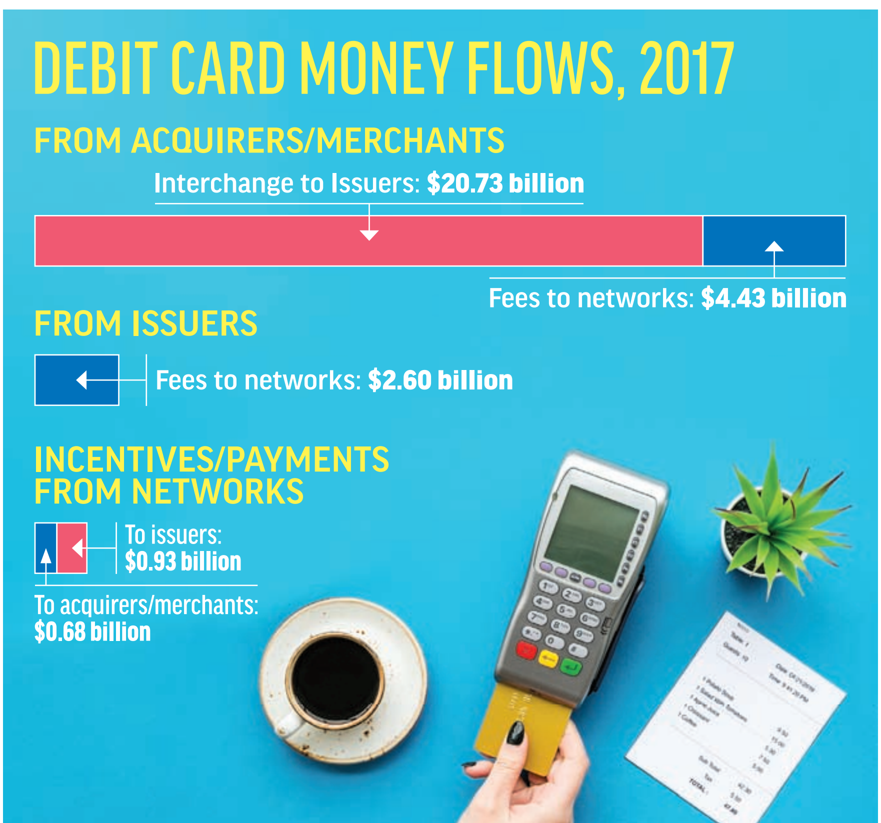
The Fed also found that PIN-debit interchange received by smaller, unregulated debit card issuers is trending down. And merchants are paying a greater share of network fees compared with debit card issuers.

Fraud, meanwhile, remains within tolerable limits, but who's left holding the bag also is shifting.

"Merchants are bearing more of the cost," says consultant and debit market researcher Patricia Hewitt of Savannah, Ga.-based PG Research & Advisory Services.

'LONG PAST TIME'

The Durbin Amendment to 2010's Dodd-Frank Act required the Fed not only to implement its mandates on interchange and debit card



Source: Federal Reserve

transaction routing, but also to study the debit market every two years.

The Fed's latest research is based on two separate surveys, an annual one for networks and a biennial one for regulated debit card issuers—those with $10 billion or more in assets. The Fed received responses from all 13 networks that processed debit transactions in 2016 and 2017. Some 115 regulated financial institutions responded to the issuer survey.

The ACS data provided fresh fodder for merchants in their unceasing quest to lower payment card acceptance costs. This quest includes the still-pending second settlement of a 14-year-old class-action suit over credit card interchange as well as individual lawsuits by some big merchants. Plus, grocery-store giant The Kroger Co. is boycotting Visa credit cards in some of its California stores ("Kroger Pokes Visa in the Eye Again," April).

The new Fed study says average per-transaction ACS costs for regulated debit card issuers, excluding fraud losses, fell to 3.6 cents in 2017 from 4.2 cents in 2015, reflecting a cumulative decline of 54% since the Fed began collecting such data in 2009.

The regulated interchange rate is up to 21 cents plus 0.05% of the transaction amount. Issuers that take certain fraud-prevention steps are eligible for another penny in interchange. The Fed hasn't changed the regulated rate since it took effect in October 2011.

"The Federal Reserve's data confirms that it is long past time for the Federal Reserve to lower the base interchange rate of 21 cents to reflect the current reality in today's payment ecosystem," Austen Jensen,

DEBIT TRANSACTIONS AND VALUE, 2017

(All figures in billions)

	NUMBER	VALUE
Covered (regulated)	43.22	$1,675.57
Exempt (unregulated)	25.26	$942.07
On dual-message networks	44.47	$1,703.34
On single-message networks	24.01	$914.31
Total	**68.48**	**$2,617.64**

Note: Figures are for purchases and include prepaid cards.

Source: Federal Reserve

senior vice president of government affairs at Arlington, Va.-based RILA, said in a statement.

RILA represents 200 retailers, product manufacturers, and service providers with more than $1.5 trillion in annual sales. The organization noted that Dodd-Frank requires the regulated interchange rate to be "reasonable and proportional" to the issuer's transaction cost. The statement claims the "580% markup" big banks receive in interchange is "neither 'reasonable' nor 'proportionate' to the cost of the transaction."

A Fed spokesperson declined comment when asked by *Digital Transactions* if the central bank has any plans to change the regulated rate.

CUTTING DEALS

The fact that authorization and related costs are down isn't surprising, says payment consultant Eric Grover, principal of Minden, Nev.-based consultancy Intrepid Ventures. He notes that with ever-greater computing and telecommunications power, the marginal cost of adding one more transaction to a card-processing system "is close to zero. The real vertical costs are getting cheaper."

While ACS costs are down for the industry as a whole, expenses still vary widely among issuers. High-volume issuers—those with more than 100 million annual debit transactions—have the lowest average cost, at 3.3 cents. These issuers accounted for only 38 of the 115-issuer study group, but their cards generated 96.2% of debit transactions in 2017, according to the study.

Mid-volume issuers, with 1 million to 100 million transactions, have an average cost of 12.2 cents, while the small fry, with fewer than 1 million transactions, have the highest average cost, at 47.7 cents.

Still, low-volume issuers in 2017 saw their average ACS costs decline from about 50 cents in 2015, while mid-volume issuers' costs rose very slightly. The difference probably is explained by the low-volume issuers, which outsource virtually their entire card-processing operations, enjoying greater scale economies passed on by their third-party processors, according to researcher

Sarah Grotta, director of the debit and alternative products advisory service at Maynard, Mass.-based Mercator Advisory Group Inc.

But mid-size issuers may be using a combination of in-house systems and outsourced services, what Grotta calls "a mix of technology and not enough scale" that didn't produce cost cuts.

The Fed says 76% of regulated issuers had average ACS costs, including their fraud losses, below the base interchange rate, and that ACS costs for 99.7% of regulated transactions were below the base rate.

With the Fed staying mum, it's unknown if or when regulated interchange could be heading down. And it's unclear whether big retailers, while they would appreciate a cut, really need it to improve their bottom lines. Grotta notes that most big merchants have cut deals with the card networks to give them lower rates than published ones.

"The largest merchants are paying rates that are much lower, anyway," she says.

'NO CHOICE'

Regarding another sore point, RILA said big banks aren't abiding by the Durbin Amendment's requirements for transaction-routing competition in e-commerce purchases. The amendment says merchants must have a choice of at least two unaffiliated networks in a debit transaction. A RILA spokesperson could not be reached for further comment.

But others agree routing remains an issue, and not just in e-commerce. A partial explanation is the industry-specific accounting applications used by many merchants may come with predetermined payment choices. Robert Steen, chief executive of Bridge Community Bank in Mechanicsville, Iowa, points to the example of his son, a veterinarian, who uses a payment program that interfaces with his accounts-receivable system.

"He has … no choice [on] how to route that transaction, and that's happening all over the place," says Steen.

Other findings from the survey give mixed signals about merchants' card-acceptance costs. For example, debit card transactions from so-called exempt issuers—those with assets under $10 billion and thus not subject to interchange regulation—are generating less interchange on single-message debit networks. Such networks, often called PIN-debit networks, produced a per-transaction average of 31 cents in interchange in late 2011 but only 25 cents in 2017—a reduction of 19%.

"The non-Mastercard-and-Visa networks are having to get very competitive with merchants so that they can retain that volume for their networks," says Mercator's Grotta. "Because of that, the smaller financial institutions are the ones that are seeing less interchange."

Conversely, smaller merchants often let somebody else make the routing decision, which means many point-of-sale debit transactions that could be routed on cheaper PIN-debit rails instead go through as dual-message transactions. Dual-message debit frequently is referred to as signature debit because it traditionally has used the Visa and Mastercard systems, and it usually costs more than single-message debit.

"A lot of the merchants, particularly the smaller merchants, they just do what they're told by the processor," says Steen.

FEELING PAIN

While regulated interchange hasn't changed and unregulated PIN-debit interchange is trending down, the story is different with network fees. These fees totaled $7.03 billion in 2017. The average network fee per transaction was 10.3 cents in 2017, which has not changed substantially since 2011, according to the Fed. Merchant acquirers paid 63% of network fees while issuers paid the rest.

"In recent years, the percentage paid by acquirers has increased slightly while the percentage paid by issuers has correspondingly decreased," the text of the report says.

> 'Issuers have a greater ability than acquirers to deliver more payment share to the network.'
> —**ERIC GROVER**, PRINCIPAL, INTREPID VENTURES

Why the shift? While the Durbin Amendment gave merchants more of a say-so over transaction routing, issuers—with their ability to put this network's or that network's logo on their cards—still have more clout with networks than acquirers and merchants, according to some observers.

"Issuers have a greater ability than acquirers to deliver more payment share to the network," says Grover.

In other words, issuers' card numbers trump merchants' transaction numbers, unless you're talking about the top tier of merchants. And most merchants are reluctant to overrule a customer's choice over which card to use.

"I don't think merchants have demonstrated that they can shift volume away," says consultant Hewitt. "Not until the networks feel pain" will there be "some downward pressure on fees," she says.

Merchants also are bearing more of the cost of debit card fraud. The Fed report says losses to all parties—merchants, issuers, and cardholders—on regulated issuers' cards were 11.2 basis points, or $11.20 per $10,000 in transaction value, up from 10.3 basis points in 2015. Merchants absorbed 53% of 2017's losses compared with 39% in 2015.

The most plausible explanation for this lies in the U.S. conversion from magnetic-stripe cards to the EMV chip card standard. The key event was the payment networks' October 2015 liability shift that required merchants to absorb the expense of counterfeit fraud if their POS systems could not read a credit or debit card's EMV chip.

The introduction of EMV chip cards and POS terminals that could read them was not far along during the 2015 debit study. But the value of chip-based payments in 2017 comprised more than half the value of general-purpose card payments for the first time, the Fed said in a separate study. Thus, merchants that could only read a card's mag stripe very likely were eating more fraud.

The overall increase in fraud probably reflects fraudsters moving to online channels now that EMV has made counterfeit fraud at the point of sale harder to commit, according to Grotta. Card-not-present transactions accounted for 18.9% of debit volume in 2017, but the CNP growth rate of 22.6% in the 2016-17 period was almost 10 times the 2.3% growth in card-present transactions, the Fed reported.

In any case, the larger share of network fees and fraud losses merchants are absorbing could serve as an impetus to finding a solution that lowers their costs, even if that solution isn't obvious today. "The cost of payments continues to shift to the merchants' shoulders," says consultant Hewitt. "Some day that's going to give." DT

Independents that don't switch to EMV face the real risk of reputational harm.

A YEAR OF OPPORTUNITY FOR RETAIL PETROLEUM

Independent gas stations will have their hands full with the shift to EMV, but there are ways to mitigate the pain. And ISOs can help.

BY O.B. RAWLS

O.B. Rawls is president of Payment Processing North America, Paysafe Group.

THINGS ARE LOOKING UP for U.S. gas stations. In 2018, vehicle registrations hit 276 million—up 6 million from 2017. And that number is set to rise to 281 million in 2019, largely thanks to the country's continued economic health and an employment boom. Commercial vehicles and individuals are racking up more miles, too.

Clearly, 2019 is shaping up to be a year full of opportunities. And not just for the big chains. Independent gas stations will benefit, too.

That said, if the independents are to catch the wave, they must first come to grips with the shifting payments landscape and customers' changing needs and expectations.

In our latest whitepaper, we had a look at the main payments challenges independent gas stations face and how independent sales organizations can support them along the way. Here's what we found out.

GETTING TO GRIPS WITH EMV

Card fraud remains a pervasive problem in the U.S. When we interviewed consumers for our 2018 *Lost in Transaction* report, 34% told us they'd been victims of fraud, with the average loss clocking in at $303. In 2018 alone, 60 million cards were compromised.

There are two main reasons why card fraud is still so prevalent. First, many customers still use their card's magstripe, often because EMV-enabled card readers aren't available. Second, skimming is on the rise.

The shift to EMV-enabled terminals, the deadline for which is October 2020, has been hugely challenging for independent gas stations due to the cost, a dearth of skilled installation technicians, and problems integrating with at-the-pump terminals' legacy infrastructure. This last issue is especially problematic, seeing as 72% of Americans prefer to pay at the pump. Because the challenge is so great, preparations are already under way to meet the deadline.

These implementation challenges have also meant that skimming—stealing card details via hardware attached to payment terminals—has grown at an alarming rate. Last Thanksgiving, the U.S. Secret Service launched "Operation Deep Impact" to tackle credit card skimming devices (following similar but smaller initiatives on Memorial Day, Independence Day, and Labor Day). Before the end of the month, more than 200 skimming devices had been found and an estimated $6 million of fraud had been prevented.

With individual merchants now starting to gain a reputation for their susceptibility to fraud, independents that don't switch to EMV face the real risk of reputational harm. As a result, ISOs can expect an uptick in requests for help making the change, especially from smaller independents.

GOING CASHLESS

While cash is still a force to be reckoned with, alternative payment methods are hot on its heels. The average American now carries $42 in cash—$8 less than in 2017. And a majority expect to carry even less in two years' time.

By contrast, the popularity of alternative payment methods is on the rise. Our latest *Lost in Transaction* data found that 61% of U.S. consumers prefer to shop in places that accept contactless. And with two in every five cards expected to be contactless-enabled by 2021, appetite for that technology—as well as technologies such as mobile payments—can only continue to grow.

Merchants, including gas-station owners, are keen to satisfy the demand. Some 23% plan to start accepting contactless within the next two years. And a further 33% plan to start taking mobile-wallet payments, which will increase acceptance to 62%.

Given that implementing the two technologies comes with similar challenges, independents may find that upgrading to EMV and contactless-enabled technology at the same time will be more cost-effective.

WHAT ABOUT SURCHARGING?

With gas stations earning as little as 25 cents per gallon of fuel, surcharges on credit card payments are often a matter of survival. At the same time, discounts are often applied to cash payments to incentivize them.

The flipside is that surcharges are far from well-received, especially by younger generations accustomed to cashless payments. Our research shows consumers feel increasingly confident using their preferred method to pay. And they're taking less and less kindly to being forced to use one payment method over another.

To cloud the waters further, 6 states and Puerto Rico currently ban surcharging. And another 17 states are considering similar bans.

It's time for independent gas stations to start looking at alternative solutions that will preserve their razor-thin profit margins while keeping consumers happy. And, here again, ISOs can provide invaluable support and advice.

THE FLEET CARD BOOM

With fleet operators increasingly looking to keep costs in check, fleet card usage is skyrocketing. By 2022, the fleet card industry will be worth an estimated $11.7 billion and North America will be the second largest market.

Getting in on the action has clear benefits for independent gas stations. But to do this, partnering up with a payment-services provider will be crucial.

With the economy booming and customer demand soaring, 2019 is replete with opportunities for independent gas stations. But to make the most of them, they'll need to evolve and adapt.

Fighting fraud, empowering consumers, and giving them more payment choices at the pump will be crucial differentiating factors. And the advice and support of ISOs will be invaluable. DT

A slightly different version of this piece originally appeared on the Paysafe Web site.