

# DIGITAL TRANSACTIONS

Trends in the Electronic Exchange of Value

## THE BREWING RIVALRY FOR REAL-TIME PAYMENTS



The Fed will debut FedNow next year. It will face a highly complex—and surprisingly competitive—market for the instant transfer of value.

Volume Nineteen, Number Ten • DigitalTransactions.net • October 2022

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Cover Illustration: Elizabeth Novak, 123rf.com



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# the gimlet eye

## THE GREAT EXPERIMENT

**IMAGINE INITIATING** A payment on your phone and seeing it settle into your payee's account as fast—or just about as fast—as if you had handed him the same sum in cash. The dream of instant payments has been around probably for as long as electronic rails have existed for money transfer. But it was always that—a dream. Credit card and debit card payments have come close in recent years, and even automated clearing house transfers have speeded up to same-day settlement, but there's always been a lag, no matter how small.

Well, if nature abhors a vacuum, the payments business has come to abhor a lag. And so Visa and Mastercard have worked on speeding up their networks, and The Clearing House Payments Co. LLC, a New York City-based company owned by many of the nation's biggest banks, launched a genuine real-time network as long ago as 2017.

Now comes the Federal Reserve. Yes, the Fed. It's on the cusp of delivering on an instant-payment system it first outlined in 2019—to the surprise of the payments industry—and has been diligently building and testing ever since. Late this summer, Vice Chairman Lael Brainard announced FedNow will start delivering transactions commercially between May and July. The announcement further narrowed the window for launch from the goal it started with, 2022 or 2023, to 2023, to now next spring.

While many observers are wondering who can compete with the Fed, the private sector is busy doing just that (see our cover story, which starts on page 22). The aforementioned TCH is one formidable private provider, with the advantage of actual volume on its rails and five full years of experience. And companies ranging from the big card networks to technology companies like ACI Worldwide are bidding to get their slice of the expected volume (see page 10).

Real-time settlement isn't always optimal, of course. There will remain situations in which it is to the payor's advantage to have a bit of lag time—for example, when the payor needs a couple of days to get the money into his account. But the latent demand is palpable enough to induce what is probably the most ambitious investment in network building since the dawn of the bank card systems.

The question is how the capability for routine real-time transfers will reshape the payments industry. Commercial transfers are one thing, but payments on the retail level are quite another. As stores start collecting instant payments from customers, how will that immediate liquidity reshape commerce in the United States?

We don't pretend to know. But we're interested to see how this great experiment will play out.

*John Stewart, Editor* | [john@digitaltransactions.net](mailto:john@digitaltransactions.net)

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Trends in the Electronic Exchange of Value

**PUBLISHER** Robert A. Jenisch

**EDITOR-IN-CHIEF** John Stewart

**SENIOR EDITOR, DIGITAL**  
Kevin Woodward

**CORRESPONDENTS**  
Jim Daly, Peter Lucas

**ART DIRECTOR/PRODUCTION EDITOR**  
Elizabeth Novak

**EDITORIAL ADVISORY BOARD**  
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Chief Technology Officer,  
AGS Encryptions Ltd.

**DIRECTOR OF ADVERTISING**  
**Robert A. Jenisch**, 877-658-0418  
[bob@digitaltransactions.net](mailto:bob@digitaltransactions.net)

**ADVERTISING SALES REPRESENTATIVES**  
**Robert Mitchell**, 877-658-0418, x7  
[bmitchell@digitaltransactions.net](mailto:bmitchell@digitaltransactions.net)

**Rob Akert**, 877-658-0418, x6  
[rakert@digitaltransactions.net](mailto:rakert@digitaltransactions.net)

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John Stewart, Managing Director  
Robert A. Jenisch, Managing Director

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## BEHIND THE DIGITAL DOLLAR PROJECT'S 'SANDBOX'

While the Federal Reserve mulls the concept of a national digital dollar, private-sector actors are working toward the same end. The Digital Dollar Project at the end of August launched what it calls a Technical Sandbox Program in an effort, it said, to help advance understanding of the technical requirements undergirding a central bank digital currency (CBDC) for the United States.

The program was set to begin this month and will focus initially on cross-border payments, the foundation said. Overall, the program's work is expected to result in "robust pilots that improve the outcomes and usability of CBDCs," said Jennifer Lassiter, the foundation's executive director, in a statement.

The data gathered from the pilots will be "broadly shared" with both public-sector and private entities

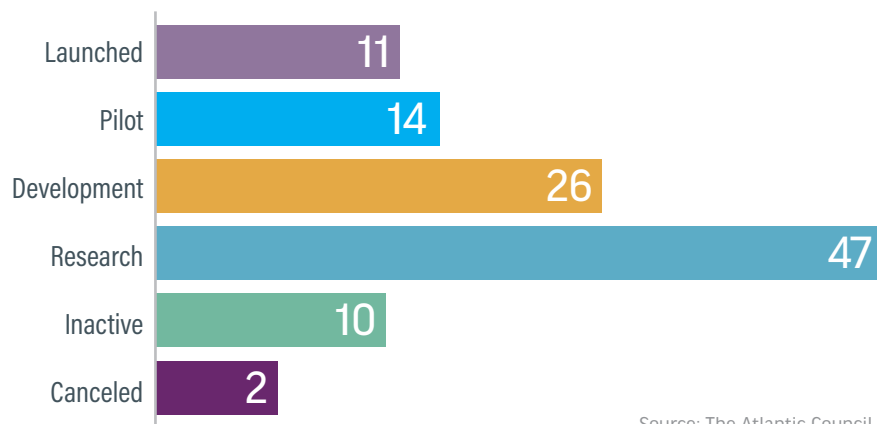
interested in the digital dollar concept, the foundation said. "The Digital Dollar Project is excited to bring a broad array of industries and technical experts together to define desired outcomes and explore a wide range

of technical design choices in relation to a U.S. CBDC," Lassiter said in her statement.

Lassiter left the Consumer Financial Protection Bureau a year ago after seven years with the regulator

### STATUS OF CBDC PROJECTS WORLDWIDE

(112 countries and currency unions tracked)



Source: The Atlantic Council



and took over the reins at the Digital Dollar Project last fall.

The launch of the Project's latest initiative follows efforts by the Fed to explore the advantages and disadvantages of a CBDC. In January, the nation's banking regulator released a 40-page white paper exploring the concept and requesting comment, while remaining scrupulously neutral on the subject.

At the time, the Digital Dollar Project applauded the paper but cautioned that more thought was needed on how digital-dollar projects would protect user data.

The DDP's effort is not the first to try to introduce a token that could stand in as a digital version of U.S. currency, either in cooperation

with the Fed or as a private-sector effort. Perhaps the best-known private-sector initiative is Circle Internet Financial Ltd.'s USD Coin, a stablecoin whose value is tethered to the dollar.

In January, Visa Inc. and blockchain developer Consensus Inc. said they planned to introduce a pilot platform for CBDCs. Visa this spring became a member of the DDP, which says more than 40 companies, organizations, and individuals have joined the Project. Consensus had said earlier it was working with Mastercard Inc. to develop software to support a variety of blockchain applications, including CBDCs.

Now the DDP's latest announcement makes it plain its Technical

Sandbox Program is intended to work with both the private and public sectors. "We understand how important it is to include a diverse set of views and expertise as we look to answer key questions about how the technology could work, the problems we hope to solve, and the ultimate business and individual outcomes we want to achieve," Lassiter said in her statement.

The DDP was launched early in 2020 by the consulting giant Accenture Inc. and J. Christopher Giancarlo, a lawyer who served for two years as chairman of the Commodity Futures Trading Commission, stepping down in July 2019. Giancarlo is executive chairman of the DDP.

—John Stewart

# THE FED OPENS UP FOR FINTECHS

For years, payments fintechs with a bank charter have labored under a requirement that, for money movement, deposit-taking, and other related services, they largely had to work with another federally chartered bank. In August, the nation's top banking regulator announced an important change to its rules that could sweep away that crucial requirement for a rapidly growing list of these firms.

The Federal Reserve said it has determined standards by which it will now review applications from certain fintechs with a bank charter for an account, known as a master account, with the Fed. The account would grant fintechs direct access to services such as the Fed's payments rails.

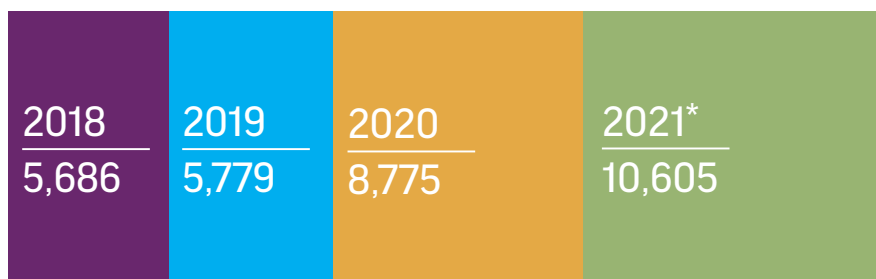
"The new guidelines provide a consistent and transparent process to evaluate requests for Federal Reserve accounts and access to payment services in order to support a safe, inclusive, and innovative payment system," said Lael Brainard, the Fed's

vice chair, in a statement.

The Washington, D.C.-based Electronic Transactions Association, among whose 500 members are well-known fintechs such as Adyen, Block, PayPal, and Stripe, applauded the Fed's decision. "We like it. It sets

## FINTECHS ARE WILD

(Number of startups in the Americas region)



\*As of February. Source: Statista

out the beginning of a process for a fintech to work directly with the Fed,” notes Scott Talbott, senior vice president for government relations.

The Fed’s announcement does not set a definite effective date for the new rule, stating it will take effect upon publication in the Federal Register. But the regulator said it will take a risk-based approach, granting more leeway to some businesses under certain circumstances.

“Institutions with federal deposit insurance would be subject to a more streamlined level of review, while institutions that engage in novel activities and for which authorities are still developing appropriate supervisory and regulatory frameworks would undergo a more extensive review,” the announcement says.

In practice, the guidelines will be applied by the 12 regional Federal Reserve Banks, according to the announcement. But there is no guidance so far regarding how long the approval process might take. “There’s nothing in this final guidance about timing,” says Talbott. “The Fed takes its time. If you don’t get an answer, that’s a ‘no.’”

Indeed, while the Fed has opened a critical avenue that could lead to direct access to Fed services for fintechs with a bank charter, nothing is automatic under the new set of rules.

“It’s a marginal but important step toward these charter-holding fintechs working with the Fed,” Talbott notes. “But what this announcement does is, the Fed recognizes that more than banks want access to a master account, and they will at least consider an application from these types of fintechs.”

—John Stewart

# IS BNPL EATING INTO CREDIT CARDS?

Consumers are spending significantly less on their primary credit cards, says J.D. Power’s 2022 U.S. Credit Card Satisfaction Study.

Overall, credit card holders are allotting 42% of their monthly spending to their primary credit cards, down from 47% in 2021 and 2020, and down from 50% from 2019. That decline comes in spite of a year-over-year rise of five points, to 810, in J.D. Power’s consumer-satisfaction score for credit cards.

Service improvements by card issuers, more favorable credit card terms, and mobile and communication factors/subfactors are key reasons for the increase in satisfaction, the study says. J.D. Power’s scores are based on a 1,000-point scale.

One culprit for the slip in card spending, the study says, is buy now, pay later loans, which offer consumers a more flexible financing method for purchases than credit cards.

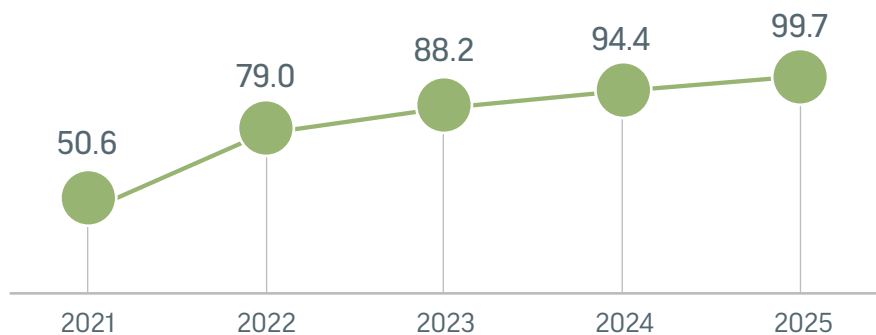
One advantage of BNPL loans is that consumers can pay for purchases over a preset number of interest-free installments, which increases their purchase volumes. Indeed, 44% of credit card customers say they would consider other financing options, such as BNPL, flexible financing/installment loans, or personal loans when making large purchases, the study says.

Of those payment options, BNPL is the most popular, with 28% of consumers saying they would consider a BNPL loan when making a large purchase. Reasonable fees and competitive interest rates are other factors helping drive consumer consideration of BNPL loans, J.D. Power says.

“Credit card issuers are doing a relatively good job of building strong customer relationships in a highly uncertain economic environment, but there are some very real concerns looming on the horizon,” John Cabell, director of banking and payments

## BNPL BUMPS UP

(Current and projected number of U.S. users, in millions)



Source: eMarketer

intelligence at J.D. Power, says in a prepared statement. “Chief among these is the declining share of spend going to primary credit cards.”

Despite recent spikes in travel and spending, cardholders generally have been taking a more cautious stance with credit card spend in the past five years. They are increasingly turning to other channels, such as debit cards, BNPL, and even cash. Ironically, debit cards are often used to fund the installment payments involved in BNPL programs.

To offset the decline in spending on primary cards as the current economic cycle moves into its next stage, Cabell says it will be critical for card issuers to improve product value and increase support for financially stressed customers.

Current economic conditions have put more consumers under financial stress, with 57% of credit card holders now classified as financially unhealthy, up four percentage points from a year ago, J.D. Power says. In addition, 22% of consumers say they are worse off financially than they were the prior year, compared to 18% who said so a year ago, and 49% say they are carrying revolving debt on their primary cards, up from 43% in 2021.

Financial stress could make consumers more likely to reassess their credit choices. Just 31% of credit card customers feel their frequent purchases completely maximize their rewards.

“As the economy tightens and new lending alternatives continue to emerge, it is an ideal time for customers to reevaluate their current card choices to ensure alignment between spending and rewards/benefits,” the study says.

—Peter Lucas

# E-COMMERCE SOARS; NETWORK TOKENS TAKE OFF

Visa Inc. has now issued more network tokens than there are physical Visa cards, eight years after the launch of the Visa Token Service. With a boom in e-commerce and other digital applications, the service has issued more than 4 billion tokens, Visa said, almost twice as many as were in effect a year ago.

With Visa’s announcement, “the message is very clear—tokenized transactions is where [payments] are and where they’re going to stay,” says Thad Peterson, a senior analyst at the Aite-Novarica Group, a Boston-based financial-services consultancy. As recently as June 2020, Visa said it had issued 1 billion tokens.

With tokenization, card issuers can replace sensitive data associated with physical payment cards, such as account numbers and expiration dates, with strings of symbols that

would be meaningless to hackers if intercepted.

The technology is not new but got a big lift with the introduction in 2014 of Apple Pay and other mobile wallets, which enable the use of virtual cards. “Each virtual version of a card is attached to a token,” notes Peterson.

Tokenization has gained further momentum from the accelerated growth of online commerce during the pandemic. Looking at more than 8,600 issuers and 800,000 merchants, Visa said tokens have boosted approval rates in addition to cutting fraud losses.

U.S. e-commerce sales totaled \$257.3 billion in the second quarter, according to preliminary numbers from the Census Bureau, up 6.8% from the same period in 2021 (chart).

“The uptick in issuers, acquirers, merchants, and consumers all transacting with Visa tokens reinforces that the future of money is truly digital, and digital money must be built on trust,” said Jack Forestell, executive vice president and chief product officer at Visa, in a statement.

Tokenization in recent months has also found applications in forms of electronic payment beyond cards. The Clearing House Payments Co. LLC, for example, said this spring it was working on using tokenization to mask deposit-account and routing numbers associated with automated clearing house transfers.

—John Stewart

## E-COMMERCE'S HEADY CLIMB

(Second quarter retail sales volume in billions and year-over-year change)

2022	\$257.3	6.8%
2021	\$240.9	14.2%
2020	\$211.0	52.7%
2019	\$138.2	10.3%
2018	\$125.3	15.2%

Source: U.S. Bureau of the Census

# REAL TIME AT THE POINT OF SALE? IT'S A REAL LIKELIHOOD

Don't look now, but real-time payments are likely to come to a store near you—and very soon. The near-instantaneous payment technology is typically thought of as most appropriate for bulk or business-to-business transfers, but this month ACI Worldwide is expected to start promoting a service that will let U.S. consumers pay U.S. billers in real time over the Federal Reserve's FedNow rails. FedNow expects to launch nationwide some time between May and July.

The advantage for billers will be faster, and more certain, payment, at a cost that will likely come in far lower than for credit card acceptance—an edge that could appeal to an even wider audience of sellers. “The benefit for merchants is less chargebacks and less cost. It's cheaper than a debit card or credit card transaction,” says Basant Singh, senior vice president and head of product in the merchant business

unit at ACI. The merchant fee, he said, will fall between a nickel and 75 cents per transaction, depending on volume.

The U.S. payments business is poised to go real time, and that has payments companies eyeing retail markets that have historically been dominated by credit and debit cards. Even The Clearing House Payments Co.'s Real-Time Payments network, which has been routing instant payments since 2017, could get into the act. “RTP could be used at the point of sale or in e-commerce. I do think it will happen,” says Elena Whisler, senior vice president for sales and relationship management at New York City-based TCH, which is owned by many of the nation's biggest banks.

A big advantage for real time—aside from its instantaneous settlement—could be cost. Providers can reprice network fees with a markup, but that wholesale pricing

is said to be very low next to what merchants pay for credit card transactions. Payments consultant Steve Mott says he's heard network fees as low as 4.5 cents. At that price, banks could offer transactions at “less than the lowest flat rate on debit cards,” he notes. “It's one of the more extraordinary developments in my career in payments. Not all the banks are marching in lockstep with Visa and Mastercard any more.”

But skeptics point out that the enthusiasm for real-time transfers ignores some key benefits that cards offer, particularly to consumers. Yes, they say, merchants pay 2% or 3% per transaction, but those card fees fund innovation and rewards, argues Vijay Sondhi, chief executive of NMI, a major independent sales organization.

“Consumers are addicted to rewards. Who is going to fund those rewards” with real-time payments, he asks, at the kind of pricing Mott is talking about? “These are things that will entrench the card system,” Sondhi adds. “What is very advantageous to consumers eventually is very advantageous to merchants.”

But players like ACI's Singh argue that real-time payments have history on their side. Younger consumers are gradually filling the marketplace, and they favor real time, he says. “By 2026, 70% of the population will be Generation Z,” a generation that seeks instant settlement, with ease of use and easy management of money, he says, adding, “We are sensing a lot of demand.”

—John Stewart

## MONTHLY MERCHANT METRIC

### Total Same Store Sales YOY Growth %

This is sourced from The Strawhecker Group's merchant datawarehouse of over 3M merchants in the U.S. market. The ability to understand this data is important as SMB merchants and the payments providers that serve them are key drivers of the economy.

All data is for SMB merchants defined as merchants with less than \$5M in annual card volume as well as Standalone Merchants Only.

**Metric Definitions:** (Only use definitions related to an individual month's release)  
**Same Store Sales YOY Growth %** - Annual volume change/growth of retained (non-attributed merchants with positive revenue and volume) accounts for given period divided by total portfolio volume from same period of the prior year.

**Note:** Previous metric included all active merchants, those with positive revenue, whereas the new metric shown only includes merchants with positive revenue and volume.

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Q2'21	36.45%
Q3'21	15.61%
Q4'21	16.70%
Q1'22	11.04%
Q2'22	5.28%
Jul'22 (T3M)	4.70%





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# THE REVOLUTION IN DIGITAL MONEY TECH

**CENTRAL BANKS DO** something no one else can: they arbitrarily computer-click digital statements, and get people to regard them as tradeable instruments of value. They do so on the basis of a vague claim that this fiat currency reflects the wealth of the nation. It is not entirely a baseless statement, but it is not very precise.

The unrecognized revolution in digital-money technology is that the roads, the facilities, the operations, the corporations, the physical and organizational wealth of the country as a whole, can now be monetized with precision, and hence with stability. This will deny central banks the power to swing the value of the national currency for political purposes—which is the central accusation levied against them.

Monetizing technologies like BitMint enables a shopping-center builder to raise money against digital-equity claim checks, which transact within the community anonymously and without friction. Members of the community witness the shopping center as it is being built and agree to accept its equity claim checks as money because they trust their eyes. They see this center is strategically located and will be profitable.

Next door, a wind farm is built, which is also similarly monetized,

BY  
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and a hospital, a car dealership, an insurance company, and so on. These asset-fraction claim checks have a fiat-currency value, but this value is for comparative purposes only, to cast one asset against the other. A public ledger runs a current exchange table. People who are getting paid with an office-building equity digital claim check will instantly switch them to another asset they trust more. The dynamics of this switching will update the relative values of the monetized assets to reflect the judgment of the people.

A second layer of digital-money claim checks will be constructed as a cocktail of primary assets. Such cocktails will be more stable than their building blocks, and will give rise to a third layer, and on it goes. Eventually, people will have tradable digital claim checks representing the wealth of the nation—the ultimate monetary reference for national trade.

And how does the central bank fit into this equation? In a very narrow way. Suppose the U.S. Federal Reserve decides to help the government in

power by printing oodles of dollars to fund a popular social program. The ensuing inflation will increase the price of, say, a parking-garage equity slice from \$100 to \$140. But at the same time, a certain equity slice of a shipping company would also increase from \$2,000 to \$2,800. The dollar values jump, but the ratio of the parking-garage equity slice to the shipping-company equity slice remains the same—for as long as the trading public maintains its view of the relative values of the traded assets.

Come to think of it, this is what the stock market is all about. It's a repository of the wealth of the nation, a summary of what is there for the community to share. Modern digital-money technology simply pushes the stock-market concept a step further, rendering the shared wealth into daily payable instruments of value for airline tickets, for groceries, for a cup of coffee, and so on. Digital monetization will allow any asset holder to sell slices of his or her property as long as the assets are listed on a universal public-exchange ledger.

Is this what the future will look like? It is a possibility. But we have only begun to think about the long-term implications of this historic transformation of money from matter to cyber. One thing is certain: It will be an earth-shaking event. **DT**

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# HOW TECH CAN GET YOU CROSSWISE WITH THE CFPB

### THE CONSUMER FINANCIAL

Protection Bureau appears to consider regulating technology to be critical to its mission of protecting consumers. Clearly, the growth of algorithms, machine learning, and artificial intelligence in financial services seems to be leading the Bureau to target problems caused by these tools.

Technophiles often present automated decision-making systems as a way to eliminate messy human biases and cognitive errors. The idea is that technology will produce a better outcome and that it is often so complex that it is beyond most peoples' understanding.

For its part, the Bureau seems to be calling shenanigans on algorithms in general. Several examples demonstrate this. In August, the Bureau issued Consumer Financial Protection Circular 2022-03 in response to the follow question:

“When creditors make credit decisions based on complex algorithms that prevent creditors from accurately identifying the specific reasons for denying credit or taking other adverse actions, do these creditors need to comply with the Equal Credit Opportunity Act’s requirement to provide a statement of specific reasons to applicants against whom adverse action is taken?”

The Bureau’s answer was clear: complex algorithms are not an excuse to avoid complying with regulations. “A creditor’s lack of understanding



BY BEN  
JACKSON

[bjackson@ipa.org](mailto:bjackson@ipa.org)

of its own methods is therefore not a cognizable defense against liability for violating ECOA and Regulation B’s requirements,” the Bureau wrote.

The same month, the Bureau announced that it had fined Hello Digit LLC, San Francisco, in a press release entitled “CFPB Takes Action Against Hello Digit for Lying to Consumers About Its Automated Savings Algorithm.”

The Bureau said that Hello Digit’s algorithm failed to prevent overdrafts, that the company failed to reimburse customers for overdrafts that were incurred, and that it kept interest that should have gone to customers. It issued a fine of \$2.7 million plus at least \$68,145 to reimburse customers.

When the news broke, industry watchers questioned why the Bureau was going after Hello Digit rather than the banks that charge the overdraft fees. In his “Fintech Takes” newsletter, Alex John summed up the reaction: “[T]his one seemed to rile up the fintech Twitter community, with observers arguing that A.) the language used by the CFPB in its press release was overly harsh and B.) the penalty imposed by the CFPB was out of proportion to the actual harm caused by Digit...”

In the press release announcing the fine, CFPB Director Rohit Chopra is quoted as saying, “[C]ompanies have long been held to account when they engage in faulty advertising, and regulators must do the same when it comes to faulty algorithms.”

The language of the headline and Chopra’s quote seem to show the Bureau wants to put the focus on the underlying technology. In these quotes and in the Bureau’s order on credit notices, the Bureau is saying, in effect, regulators should be critical of technology and not believe that it will magically solve problems.

The CFPB is not stopping with algorithms. It has published a circular warning companies that they will violate consumer financial protection laws if they fail to protect consumer data. It also issued an interpretive rule indicating digital marketers that use targeting tools for advertising financial services are also subject to federal consumer financial protection laws.

Fintechs should recognize the pattern in all of these actions. Financial-services providers need to examine the role of technological decisionmaking in their operations and how it fits with applicable consumer regulations. The Bureau will not let companies hide behind complex algorithms to escape compliance.

If technology is at the heart of a product, all departments need to play a role in running the machine. **DT**



# acquiring

## THE FIRST IMPRESSION

The key to reducing merchant attrition is as simple, and as complicated, as making a good first impression. The right tech helps, too.

BY KEVIN WOODWARD

**ONE TACTIC THAT** may help keep merchant attrition rates in check—especially when large and small businesses have even more choices for their credit and debit card processing than they did some years ago—may be to start at the beginning.

Merchant attrition happens when a merchant switches its payment-processing services to another provider. It's long been a part of the acquiring industry. Every organization strives to keep that rate as low as possible.

But competition, as ever, is fierce. And it's now more prevalent, especially as more small businesses adopt sophisticated processing

systems that extend beyond the venerable countertop point-of-sale terminal.

Here's evidence of that influence. Of the merchants surveyed in the J.D. Power 2020–2022 U.S. Merchant Services Satisfaction Study, 34% cited a desire for better POS and payment-processing equipment and software as the reason they switched. That's up from 31% in 2021 and from 28% in 2020.

Accompanying this embrace of more sophisticated POS equipment and software is the growing loyalty merchants have developed for systems that cater specifically to their needs. It's a common enough phenomenon within the independent software industry, and now it's spreading to small and medium-size businesses and other merchants.

In fact, the services beyond payments have become so valuable that merchants may be less likely to switch if a competitor doesn't offer a better suite of products. That's why when processors approach merchants with new hardware and software services, the key to keeping those merchants in the fold is to make a good first impression.

"It comes down to making the first impression count," says Jared Drieling, senior director of marketing intelligence and insights at Omaha, Neb.-based The Strawhecker Group.





# Sondhi: “There’s no magic number” for attrition.

“If they have this first-impression experience, they’re likely to live longer with a processor.”

## DON'T FORGET TECH

For now, at least, attrition rates have calmed somewhat after spiking during the Covid pandemic. A Strawhecker report almost a year ago found that attrition collectively reached 26.7% in the second quarter of 2020, but calmed to 20.4% in the same quarter a year later, below rates seen in the same quarters of 2018 and 2019. The firm’s latest report showed a rate of 21.1%

Acknowledging there are scores of other factors when a merchant considers switching payment providers, Drieling says the onboarding experience, from sales to underwriting to enrollment, appears to be a key driver in retention. “What we’ve learned from a sound merchant experience is the best way to [retain merchants is] to know their needs and match their needs with your products,” he says.

The quality of the merchant-onboarding process is the top reason

merchants switch, Drieling says. The quality of available products and services, transparent pricing and communication, and the provider’s willingness to develop new products and services round out the four primary reasons merchants take their business elsewhere, he says.

The availability of technology—a factor that gained more importance for many merchants during the pandemic—also cannot be understated.

“We know there’s a lot going on with better technology,” says Paul McAdam, J.D. Power’s senior director of banking and payments intelligence. “The technology that merchants are looking for these days is not only the basics,” he says. “They’re looking for additional services like managing inventory, managing orders, and sales-volume tracking.”

How does that show up in acquiring portfolios? Those acquirers with large concentrations of e-commerce merchants may know most intimately. When e-commerce merchants with \$2.5 million or more in annual sales were asked by J.D. Power about their switching intent, 53% said they definitely or probably

will switch in the next 12 months. These merchants comprised 37% of all respondents, of which there were 4,406.

“The high-level data shows you that e-commerce merchants are more interested in switching,” McAdam says. Digging deeper, of e-commerce merchants using shopping-cart software, 59% said they were definitely or probably going to switch in the next 12 months, and 57% of those using a virtual terminal said the same.

“More of these merchants are open to looking elsewhere,” says McAdam. This represents a switch from past experience. Four to five years ago, it was the point-of-sale merchants who had lower satisfaction and much higher rates of intended switching, he adds.

## CONSTANT MONITORING

Many times there are factors out of a portfolio manager’s control that can affect the attrition rate. The overall economic environments and the influx of competitors are a couple of major factors, says Vijay Sondhi, chief executive of NMI, a Schaumburg, Ill.-based commerce company and payment-gateway provider.

“Look at right now,” Sondhi says. “What is the macro environment? Inflation is up.” Merchant processors may not control factors like inflation, but that’s the point, he says, adding, “It’s very important to tease out what



levers you have under your control versus the levers you don't have under your control."

Another way to measure attrition is to pay attention to the retention rate, Sondhi says. Retention can often get lost in all the focus on attrition, even though attrition and retention are, as Sondhi says, two sides of the same coin. To keep both numbers at the desired levels, he adds, requires constant monitoring of the merchant base.

"You have to look at whether you're losing merchants because of a market-share gain by competitors, and who it is," Sondhi says, suggesting questions such as: Is the rival another platform? Has there been a downturn in that merchant sector?

"In our case, we saw with restaurants that they had to immediately move to buy online, pick up at curbside or food-delivery options," Sondhi says, recalling a challenging period during the pandemic. "We went back and said we should offer restaurant merchants the ability to take QR codes [and] take the payment upfront or with a reader that you may not have had." The idea, he says, was to adapt and make it easier for NMI's merchants to adapt.

In another example, as consumers longed for social activity, many turned to pets, sparking a boomlet among veterinary-services providers. But access to doctor and dental offices for humans was severely restricted, effectively halting most payments

at those offices. Then, telemedicine services became more available, which helped ease the impact.

Sondhi says measuring a portfolio's attrition and retention performance is best done against baselines. "There's no magic number," he says, when asked if there is a sustainable attrition rate. "Disruption in the world increases every year with digital offerings," he says. "It depends on the industry and the economic environment."

But paying attention to these fluctuations is essential. "Any uptick in attrition should signal action," says Ralph Dangelmaier, chief executive of Waltham, Mass.-based BlueSnap Inc., a payments and commerce platform. "There is vast competition in

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# WHY MERCHANTS SWITCH

REASONS FOR SWITCHING	STUDY YEAR		
	2022	2021	2020
For better POS/payment processing equipment, software or technology	34%	31%	28%
For better customer service support	32%	27%	31%
For better security of customer and payment data	31%	28%	30%
For better reporting and account information management	30%	26%	26%
For lower payment processing fees	30%	34%	34%

Source: J.D. Power 2020-2022 U.S. Merchant Services Satisfaction Study

the current payments landscape, ranging from traditional acquirers to fintech disruptors, so this represents how merchant attrition can evolve quickly.”

In a similar approach, Dangelmaier says attrition can be countered by working with merchants at the beginning of the relationship to better understand both their short-term needs and long-term strategies. “A company that is able to provide solutions and technologies than can help a merchant set themselves apart from the competition will ultimately succeed,” he says.

## ONBOARDING IS CRUCIAL

That brings merchant-services providers back to the importance of the onboarding experience and its role in curbing attrition. Referring

again to the J.D. Power study, of those merchants who were completely satisfied with their onboarding experience, 64% said they definitely or probably would not switch payment providers in the next 12 months. That contrasts with 38% who were not at all or only partially pleased with their onboarding experience.

NMI’s Sondhi is paying close attention to this. NMI’s IRIS CRM business announced in August a series of enhancements meant to consolidate its onboarding workflows and reduce the time it takes to process merchants. Though more work is needed, Sondhi says the goal is to make the underwriting process as seamless as possible.

A quick onboarding experience extends to device set up, too, Sondhi says. Cloud processing has made it easier for merchants to self-

install their POS systems with just a connection to their WiFi networks. That can eliminate the old-school requirement of the merchant having to host a POS server on site.

Understanding that merchants lack time and patience, entities like Square, Shopify, and Stripe have expedited onboarding tools, especially for the underwriting component. Many acquirers don’t have access to the tools these tech-savvy payment providers use.

“For many acquirers, [onboarding] can be a multiday or multiweek process,” Strawhecker’s Drieling says of the underwriting process. “That wouldn’t be an issue if these merchants had the patience and time. But they do not. They expect a seamless, frictionless process. Client onboarding has become a differentiator.” <sup>DT</sup>

## CRYPTO'S UPHILL BATTLE FOR ACCEPTANCE

More merchants  
have begun  
accepting  
cryptocurrency,  
and processors  
say there's  
others to come.  
Good luck  
with that,  
say skeptics.

BY PETER LUCAS

**A DOZEN YEARS** after the emergence of Bitcoin, widespread merchant acceptance of digital currency remains more a vision than a reality.

Most merchants that do accept cryptocurrency insist on converting it into fiat at settlement, a preference that stems from their desire to avoid the volatility in crypto's value, which can fluctuate up or down at a moment's notice. For many merchants, this disadvantage offsets crypto's virtues, including instant settlement and the availability of a growing cohort of users as potential customers.

Plus, the value of cryptocurrency has been plummeting this year. Bitcoin, the best known of the cryptocurrencies, saw its price drop more than 37% in June, its biggest loss of value

since 2011, according to Coindesk, which tracks cryptocurrencies.

On one day that same month, Bitcoin also saw its biggest single-day drop in value since March 2020, a 16% decrease to \$21,910. By July, Bitcoin's value has since fallen to around \$19,000 and has hovered in that vicinity since.

"Merchants don't want to hold cryptocurrency because of its volatility and that's an obstacle to its acceptance at the point-of-sale," says Aaron McPherson, founder of AFM Consulting, a fintech and payments consultancy, and a close follower of digital currencies. "Cryptocurrency's volatility hurts it as a payment option."

### 'SPECULATIVE INVESTMENT'

These swings in value can be traced to two factors. First, many consumers view cryptocurrency as an investment because there is a fixed supply of it, unlike the case with fiat currencies. The number of Bitcoins, for example, is fixed at 21 million coins. By comparison, central banks can print fiat currencies without regard to a set ceiling on supply.

Second, cryptocurrencies are not pegged to any tangible asset, such as precious metals, or backstopped by a central bank, as with fiat currencies. This makes its value more susceptible to the whims of traders.

"Cryptocurrency is purely a speculative investment, as there is no underlying value to it," McPherson says.





## McPherson: “Cryptocurrency is purely a speculative investment, as there is no underlying value to it.”

Despite crypto’s volatility, efforts to grow merchant acceptance have not abated. Indeed, over the past 18 months, there have been several high-profile efforts to achieve mainstream acceptance. In June, Shopify Inc., a Canada-based e-commerce company, partnered with DePay, a Swiss blockchain-payments platform, to enable consumers to send direct payments to Shopify merchants’ wallets.

Shopify will leverage DePay’s blockchain—the technology that generates the official record for cryptocurrency transactions—to enable merchants to receive any preferred tokens, with automatic, real-time conversion of payments to stablecoins. Stablecoins are cryptocurrencies whose value is pegged to that of another currency, commodity, or financial instrument.

The deal is expected to spare consumers from paying a middleman to credit the merchant’s account when paying with a token. Shopify’s platform serves some 1.75 million sellers.

Eleven months earlier, Mastercard Inc. announced it will work with a pair of issuing banks and several service providers to test conversion of crypto to stablecoins for direct acceptance of crypto-backed cards on the network.

Much earlier, in March 2021, Visa Inc. announced it had processed its first transaction involving direct settlement with a stablecoin. The stablecoin was USD Coin, a digital currency linked to the dollar. The transaction was enabled by Visa’s integration

with San Francisco-based Anchorage Hold LLC, the first federally chartered digital-asset bank, and processed by Crypto.com, a digital-currency trading platform.

Meanwhile, efforts continue to sign up merchants for crypto acceptance, even if it means settlement in fiat. RocketFuel Blockchain Inc. announced early last year a one-click, blockchain-based payments solution for e-commerce transactions.

RocketFuel’s service supports payments or direct bank transfers in 43 cryptocurrencies. Transactions are settled in U.S. dollars, while RocketFuel charges merchants 1% to 2% of the transaction total.

### CONSUMER DEMAND

Other efforts to bring cryptocurrency acceptance to merchant checkouts include initiatives by BitPay Inc., a Bitcoin payment service provider, to convert cryptocurrency to cash when making a purchase. In addition to offering a digital wallet that allow cryptocurrency holders to buy, sell, store, and manage cryptocurrency, BitPay offers a debit card that automatically converts cryptocurrency to dollars at the time of a purchase.

BitPay users can also use their wallets to purchase gift cards with cryptocurrency, which is converted into dollars during settlement. BitPay users can then use the cards to complete their purchase with the merchants that sold the cards.

What differentiates this tactic, says Merrick Theobald, vice president of marketing for BitPay, is that consumers can purchase gift cards in the exact amount of the purchase, as opposed to the usual predetermined denominations, such as \$50 or \$100.

“When a consumer purchases a gift card using BitPay, the merchant doesn’t see a crypto transaction, they see it was paid for in dollars,” Theobald says. But he adds: “Even though the transaction is settled in dollars, I would argue that it is a crypto transaction because it is settled on the blockchain.”

The fact that merchants receive their funds in dollars is simply a reflection of how merchants want crypto transactions settled, says Theobald.

BitPay is working with point-of-sale technology vendor Verifone Inc. to enable a crypto transaction initiated through Verifone terminals to settle as fast as a credit or debit card transaction. “We also worked with several major cryptocurrency-wallet providers to make changes on their end” to make that happen, says Theobald. “Merchants don’t want to wait the several minutes it takes to settle a cryptocurrency transaction on the blockchain.”

As with any new payment option, there has to be consumer demand for merchants to support it. And signs seem to point to at least some increased consumer demand to pay with crypto at the point-of-sale. A study conducted in June by online payments company Paysafe Ltd. reveals that 80% of crypto holders want to pay for goods with their crypto balances, but are unable to because of a lack of merchant acceptance.

## 'MISCONCEPTIONS'

Many merchants are unclear about their cryptocurrency settlement options, says Elbruz Yilmaz, senior vice president of Crypto/Web3 at Paysafe.

"The first misconception is that merchants believe they can only settle in the crypto asset used to transact," Yilmaz says. "This is not the case when there are a number of payment-service providers handling the conversion and the settlement is in a fiat currency."

Between 30% and 50% of merchants are still unclear on cryptocurrency settlement options, Yilmaz says. Clearing up those misconceptions will require more merchant education, he says, adding, "Once merchants become more educated on the available settlement options and better understand crypto as an asset class, the demand for settlements in cryptocurrency will increase."

While Yilmaz acknowledges that volatility is suppressing merchants' willingness to settle transactions with crypto assets, he says the growing popularity of stablecoins could pave the way to move merchants away from settling crypto transactions in fiat currencies.

"Stablecoins remove the volatility ... with USDC being pegged [one-to-

one] to the U.S. dollar," he says. "We have seen the popularity of stablecoins such as USDC grow exponentially over recent years." USD Coin is a digital currency developed by the blockchain company Circle Internet Financial.

When consumers can pay for purchases using cryptocurrency, they tend to use it for big-ticket and luxury items, such as Gucci-branded products. Guccio Gucci S.p.A. is one of the luxury brands in BitPay's merchant network.

Paysafe's research confirms consumers' preference to use crypto for expensive products. Of the consumers polled, 74% said they were interested in spending their cryptocurrency on automobiles. The same percentage expressed interest in spending crypto to purchase a house, condominium and other property, and 75% said they would use it to purchase treats for themselves.

To enable the purchase of big-ticket items, BitPay has developed an e-invoicing app that allows auto dealers and other merchants to electronically send customers an invoice that can be paid in cryptocurrency. "These merchants don't necessarily have an e-commerce site, so this solution enables them to settle crypto transactions digitally," says Theobald.

At the same time, e-commerce is a popular merchant channel with crypto users. "Crypto was built to be a digital currency, so it is a natural for e-commerce," Theobald says.

One aspect consumers often overlook is the fees cryptocurrency exchanges charge when consumers sell off part of their digital assets. BitPay makes the mining fees, also known as consumer transaction fees, available to consumers so they can minimize the expense of cashing out their cryptocurrency.

## 'WAIT AND SEE'

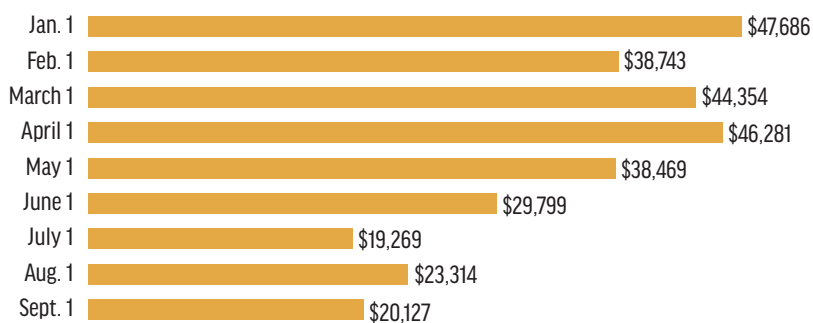
Still, all these options processors have come up with to enable cryptocurrency acceptance are simply workarounds, as they do not support direct settlement using an actual cryptocurrency, critics say.

"If a crypto transaction is settled in a fiat currency, it's no different than a card transaction," says Ariana-Michele Moore, an advisor for Aite-Novarica's Retail Banking and Payments practice.

Other stubborn hurdles to wider acceptance include a lack of consumer and merchant protections and merchants' reluctance to add a new payment option that does not seem to address a specific problem.

"The lack of protections make crypto acceptance messy for merchants, and getting merchants to change their POS infrastructure to support a new payment option that doesn't solve a problem is tough," Moore says. "A lot of merchants are also taking a wait-and-see attitude toward crypto because they want to see what the friction around acceptance will be first." **DT**

## BITCOIN'S PRICE PLUNGE (Closing prices in 2022)



Source: Coinmarketcap.com

# THE BREWING RIVALRY FOR REAL-TIME PAYMENTS



The Fed will debut FedNow next year. It will face a highly complex—and surprisingly competitive—market for the instant transfer of value.


BY ERIC GROVER





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# IN THE NEAR FUTURE, MOST PEOPLE WILL BE ABLE TO EXCHANGE MONEY INSTANTLY ANYWHERE, ANY TIME.



A patchwork of competing and collaborating national and multinational instant-payment systems with very different DNA are increasing their reach, features, and use.

Open, national, and interbank real-time-payment systems are a leading category. Observers mistakenly regard them as public utilities, but competition, and in cases interoperability, between for-profit and bank-cooperative private-sector and central-bank instant-payment networks will ensure innovation, ever-increasing value, and speedy adoption.

Immediate-payment networks will benefit from building greater reach domestically and, especially, internationally. Of the 60 countries that have traditional domestic real-time interbank payment systems, the United States is shaping up to be the world's most competitive market.

Here, the payments industry is anticipating faster-payments competition between bank-owned The Clearing House Payments Co. and the Federal Reserve. A Johnny-come-lately in this business, the Fed will step into the competitive fray in 2023 with FedNow. While it will be useful, it will not be, as the Fed in 2019 asserted to Congress, indispensable.

TCH's instant-payment system, RTP, whose development was informed and spurred by the Fed's Faster Payments Task Force, has been live since 2017. RTP reaches 61% of U.S. demand-deposit accounts. Each day FedNow isn't live increases RTP's network and experiential-capital edge, and RTP's offerings, and the RTP-based services of financial institutions, become richer.

Despite its head start, though, RTP's payment volume has been modest. There were a whopping 253 times more ACH transactions than RTP payments in 2021.



There were 29.1 billion ACH payments in 2021 valued at \$72.6 trillion, of which 604 million were same-day, valued at \$944 billion.

In the second quarter of 2022, RTP did 41 million transactions for \$18 billion. Countries with more white payments space have seen greater adoption. In the mother of emerging payments markets, 647 banks using the National Payment Corp. of India's Immediate Payment Service (IMPS)—live since 2010—did 1.4 billion instant interbank payments in that same second quarter.

Meanwhile, NPCI's real-time alias-enabled Unified Payments Interface payment system did 17.4 billion transactions in the second quarter.

## A Long-Term View

How will the Fed compete against its better-established rival, TCH? FedNow is piloting with banks and processors ACI Worldwide, Finastra, FIS, Fiserv, and Jack Henry to have a chance of reaching a reasonable number of DDAs out of the gate.

Some community banks and credit unions will prefer FedNow over a service supplied by TCH, owned by 24 large banks with which they compete and which they distrust.

While the central bank will initially price FedNow at parity with RTP at 4.5 cents per payment, it has a history of cutting fees to win volume. Most instant-payment networks' costs are fixed. Marginal transaction costs are close to zero. While statutorily required to set fees to recover its costs, the Fed has indicated it could take a long-term view of cost-recovery, and, consequently, price more aggressively than private-sector competitors.

The Fed, however, is not just another competitor. It's the financial system's paramount regulator, and it enjoys unlimited resources. Still, its payment operations—ACH, Fedwire, Check Services, National Settlement Services, and FedNow—don't need to be under the same roof that covers monetary policy and financial-system regulation. Spinning off payment operations would eliminate this conflict of interest and enhance competition.

For use cases such as planned payroll and bill payment, ACH is often entirely adequate. That doesn't mean, however, that immediate payments won't eventually displace traditional ACH. It's just that there's no compelling benefit to stampede adoption for some high-volume use cases.

## Uneven Performance

Instant-payment networks enable financial institutions, processors, fintechs, mobile-network operators, money-transfer networks, digital wallets, and closed-loop peer-to-peer payment systems to build services for consumers and businesses.

And markets are discovering domestic and cross-border real-time-payment use cases. Such benefits as instant payments to merchants for card sales, along with immediate cross-border remittances, insurance-claim payouts, last-minute bill payments, government relief, and payroll, are already improving people's lives.

Also, using RTP in June, a payments company called Sionic launched a "Pay-by-Bank" service for U.S. merchants. They will be able to fund cash back and discounts to incent use.

However, developing successful retail-payment schemes using faster-payment systems is difficult in mature markets like the United States and the United Kingdom. Unlike the existing card networks, these new systems don't feature—at least to start with—acceptance networks, robust consumer protection, grace periods, or rewards everywhere.

Moreover, instant payments don't solve a problem paying cafés and wine bars. Granted, paying \$111,000 for a Mercedes-Benz S-Class would be another story. In this rare instance, the lower-fee RTP would be more attractive than a credit card for the dealer, and likely acceptable for the buyer.

Indeed, the performance of instant payments systems around the world has been uneven. The U.K.'s Pay-by-Bank (originally Zapp) has been a failure. However, in India, digital-wallet-anchored alternative payment systems like Google Pay,



PhonePE, and Paytm make good use of the NPCI's UPI immediate-payment system.

Another promising sign is that TCH has started offering DDA tokenization—masking of sensitive account-identifying data—for use with RTP, which will improve its utility for more exposed use cases.

## 'The Holy Grail'

The competitive landscape of instant-payment networks includes more than RTP and FedNow.

Visa debuted its immediate credit-push system, Visa Direct, in 2014 and started pushing it in earnest in 2015. Last year, 120 million U.S. cards sent or received funds using Visa Direct. Mastercard's analog Mastercard Send went live in 2015.

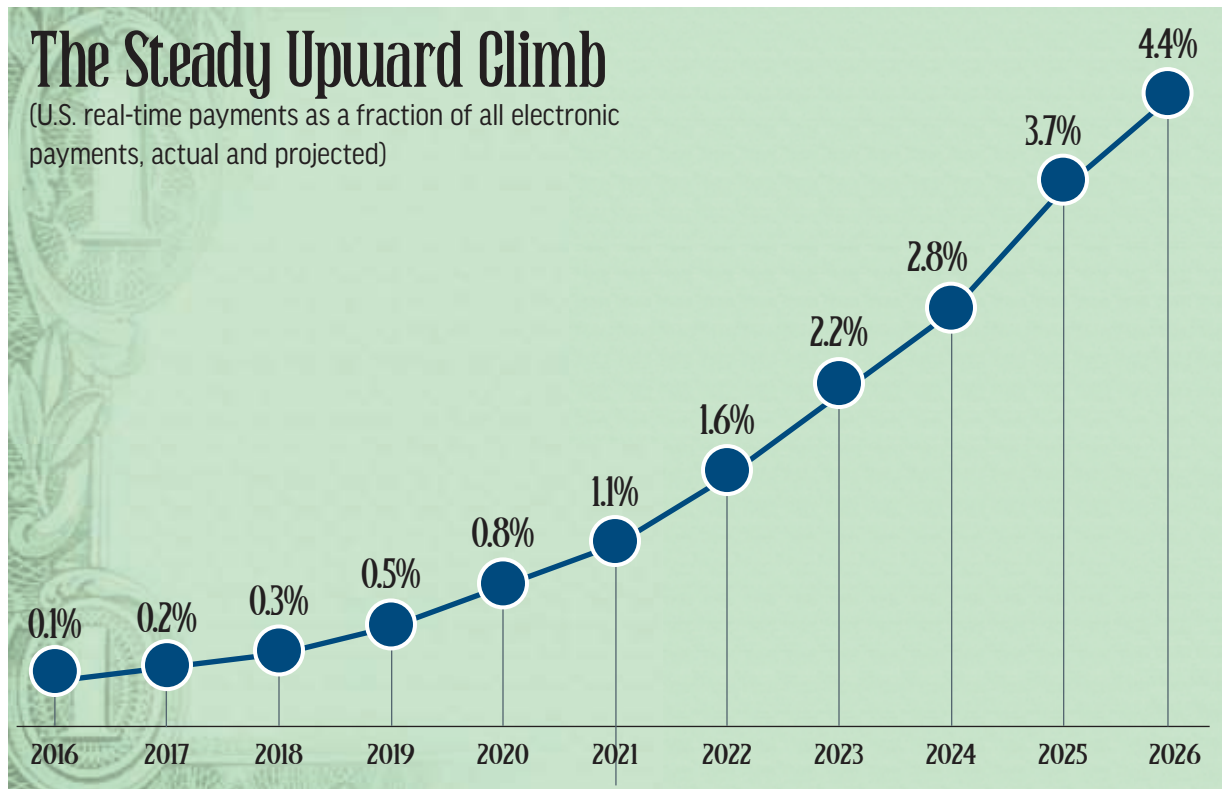
Visa Direct and Mastercard Send will continue to enjoy an advantage over RTP and FedNow by serving new, nontraditional, and cross-border use cases. In the fiscal year ended September 2021, Visa Direct did 5 billion transactions globally,

growing 35% year-over-year in the quarter ended that September.

Zelle launched in 2017, absorbing banks' peer-to-peer payment system clearXchange. In 2021, there were 1.8 billion real-time Zelle payments carrying \$490 billion in volume, up 49% and 59% respectively, year-over-year. FIS's RealNet, Fiserv's PopMoney, and Discover's Deliver also provide low-friction, low-cost immediate interbank payments.

Competition aside, some types of payment are harder to speed up than others. Cross-border payments, for example, have been notoriously slower and more costly than domestic payments.

Economists Ulrich Bindseil and George Pantelopoulos, in an ECB working paper called "Toward the holy grail of cross-border payments," declare "the holy grail of cross-border payments is a solution which allows cross-border payments to be (1) immediate, (2) cheap, (3) of universal reach, and (4) settle in a secure settlement medium, such as central bank money."



Source: ACI Worldwide, Global Data



Planetwide, national faster-payment systems are starting to interconnect, initially on bilateral bases. The ECB's Target Instant Payment Settlement (TIPS) serves 12 euro-area countries. It's working on linking TIPS and the Riksbank's real-time payment system.

In 2021, Italy's central bank, which operates TIPS infrastructure, announced an "experiment" connecting with the Arab Regional Payments Clearing and Settlement Organization's faster-payments platform.

Cooperative EBA Clearing's RT1 provides instant payments between banks in 22 European countries.

TCH, EBA Clearing, and the global payment-messaging network Swift, will pilot immediate cross-border payments between U.S. and European banks starting in late 2022.

But southeast Asian countries lead in interconnecting national real-time payment networks. The first linkage of national instant payment systems was Singapore's PayNow to Thailand's PromptPay in April, 2021.

Indonesia's, Malaysia's, and Thailand's cross-border QR-code-keyed instant-payment systems interoperated as of January. The Philippines and Singapore plan to plug in late this year.

And Singapore and India will link their instant P2P payment systems this summer.

## A 'Silver Bullet'?

But the idea of each national real-time payment system building bilateral links with every peer, planetwide, isn't optimal. Payment hubs would be more efficient. With their existing networks, Visa, Mastercard, and Swift are well-positioned to be global immediate-payment hubs. Imagine national instant-payment systems plugging into Mastercard to reach domestic systems as well as Mastercard Send and Visa Direct accounts worldwide.

Moreover, Swift and correspondent banking today have global reach and provide near-real-time cross-border payments. Incrementally enhancing a proven global network is easier than building a new one.

A range of proprietary fintech and money-transfer systems like PayPal, Western Union, and Wise support instant or near-instant cross-border payments, and will tap other faster-payment networks to enhance their own.

Also, real-time interbank payment systems have significant barriers to entry. Systems must be built and find a path to critical mass before they can have relevance and value. Nevertheless, new systems may challenge incumbent networks, and that would benefit users with a better value and/or by pushing incumbents to improve.

Evangelists tout cryptocurrencies such as Bitcoin as the silver bullet for instant, low-cost value transfer worldwide. Given regulatory hostility, value volatility, governance and performance problems, the need to convert in and out of fiat currencies, and a lack of both network critical mass and a path to it, crypto is unlikely to play a material role.

Nascent private fiat-currency-backed stablecoins and central bank digital currencies, however, have potential. Central banks are studying, piloting, and have launched CBDCs, which are instant-payment networks.

It remains to be seen, however, whether and how central bank money that can be immediately transferred anywhere any time will be superior to existing domestic and cross-border real-time payment systems.

The greatest use of stablecoins has been trading cryptocurrencies. With greater regulatory clarity, more financial institutions will issue stablecoins, and they may come to play a role in domestic and cross-border instant payments.

For most cross-border payments, AML/CFT/KYC and F/X layers will be needed, provided by the network, a financial institution, or a third party. E-dollars sent to a Swiss e-wallet might be converted to UBS e-francs. In Venezuela and Zimbabwe, however, Citi e-dollars likely would circulate unconverted.

The final lesson in all this? Diverse instant-payment systems interoperating and competing worldwide will maximize value for businesses and consumers. We're still a long way from getting there. **DT**

## TRAVEL NOW, PAY LATER

### Vacation and hospitality booking is the next wave in BNPL.

BY RALPH DANGELMAIER

Ralph Dangelmaier is the chief executive of BlueSnap.

**PICTURE THIS.** You're on the beach. The sun is shining and the luxury resort you're staying at is the farthest from home you've been in nearly two years. But you don't worry about how much it costs. That's because you, like nearly 60 million people so far in 2022, used buy now, pay later (BNPL) installments to cover the total costs.

In the last few years, we've seen consumers increasingly adopt BNPL services to pay over time for big-ticket items when shopping. Now, the next frontier for BNPL appears to be travel. And people aren't just looking, they're finally booking.

The timing is right. The Covid-19 pandemic is finally at a relatively

manageable stage. People who have waited through months of lockdowns and uncertainty want to take that beach vacation on Cape Cod or the week-long trip to Paris they've been dreaming about.

And travel and hospitality companies are now willing to offer BNPL options. For example, Affirm has partnered with Delta Vacations, Priceline and more, and Uplift offers point-of-sale loans through partners like Southwest Airlines and Kayak.

Indeed, with a wide range of flexible payment options, BNPL providers want to change the way people take their next vacation. But is it worth it for either providers or consumers?

### THE PROS OF BNPL

Let's see if we can work out the answer to that question by looking more closely at the pros and cons for using BNPL when traveling.

#### Better Control

BNPL allows people to better control when and how they spend their money. That's because they pay off purchases in specific installments that fit within a given budget. It's true most BNPL providers set the total number of payments at four installments. But others allow borrowers to expand their payment schedule to include additional





Dangelmaier

“People who have waited through months of lockdowns and uncertainty want to take that beach vacation.”

repayment portions to give people even more options.

The ability to see ahead to the ultimate cost of a vacation, or at least the total travel purchases involved, gives buyers a more secure level of control over how—and how much—they spend.

### More Convenience and Accessibility

BNPL is also a more convenient option because there is no third-party lender involved. Users can apply online and be approved almost instantly, depending on the payment platform. This means there aren't the usual hassles or hoops to jump through when you're applying for traditional loans. This

creates seamless payment opportunities without the need for a hard credit check or other barriers that usually hold users back.

### Newer Options

There are also implications for the future as payment innovations like BNPL tip the scale from traditional lines of commerce into lending models that are more digital.

If consumers become more comfortable with non-traditional buying options, and BNPL becomes more mainstream, that means there will eventually be newer options—such as embedded payments—to complement more convenient features across platforms.

If payment options are all embedded within platforms, this benefits companies and consumers throughout the travel sector in three ways. It increases revenues through monetized payments, offers additional value-added services, and improves the overall buying experience.

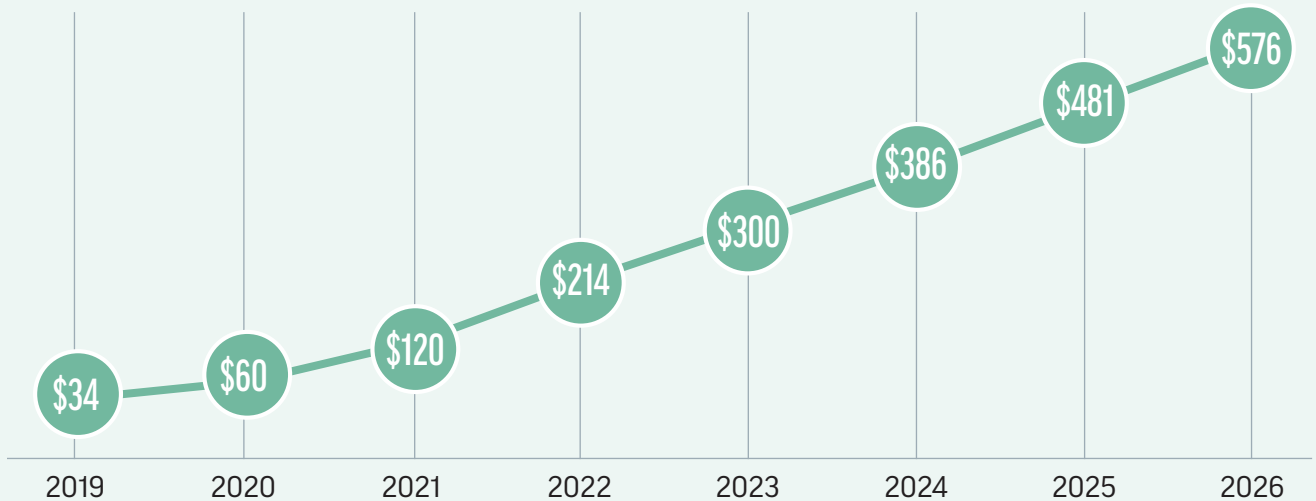
### THE CONS OF BNPL

#### Hidden Fees

Consumers should read the fine print to make sure they're well-informed on credit reporting, return policies, interest rates, and late fees for purchases. The desire to spend on once-in-a-lifetime experiences like a vacation is strong. But the inability to pay

## THE INEXORABLE RISE OF BNPL

(Historical and projected worldwide online purchase volume, in billions of U.S. dollars)



Source: Statista

on time down the road could saddle unaware buyers with late fees.

These fees could cripple a person's ability to apply for loans moving forward. And penalties are not a good way to build credit.

### Unhealthy Spending Habits

BNPL opened a quick and easy new door to those who wouldn't be able to take these trips in the past without financial installment options. But it also made it easy to overspend or cultivate a habit of taking too big a leap on products and services that are truly out of reach.

BNPL offerings can make a purchase seem more affordable than it is, and payments can add up beyond

the initial amount and beyond due to unwieldy interest rates.

## THE IMPACT OF INFLATION

A July 2022 survey from the Federal Reserve Bank of New York found that inflation is expected to grow at a 6.2% pace over the next year. Currently, airlines and lodging continue to show signs of strong demand, with the airline segment up 18.2% and lodging growing to 33.7%.

This means that as inflation continues to increase, the only way consumers can avoid rising prices—and not fall into the big-ticket spending habit mentioned above—is by tightening budgets and dealing with a

potential recession where luxury spending, including travel, will likely be the first expense to go.

Consumers' inability to pay off BNPL purchases will make it more expensive and riskier for companies to do business with BNPL providers. One thing potential travelers will look out for is, as interest rates increase, how much will the BNPL companies take in and how much will be passed on to the consumer?

Despite the pros and cons, those who acknowledge BNPL's risks while taking advantage of the benefits could drive this past the fad stage. After years of restrictions, pent-up demand must be balanced with budgetary realities for any major purchases. **DT**

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## CLOUD: THE ENGINE OF INNOVATION

Here's why payments providers can no longer afford to ignore or misunderstand cloud technology.

BY DENNIS GADA

Dennis Gada is industry head, financial services at Infosys.



**CLOUD IS A** key factor in the expected growth of the digital-payment gateway market to \$416 billion by 2024. Non-bank players, from big tech to e-commerce giants to fintech startups, are leveraging the fearsome capabilities of cloud to lead payment innovation. Apple Pay, Amazon Pay, Stripe, and Chime lead a long list of services that are disrupting this space.

Three digital payment niches dominated by next-gen providers are microfinance, mobile money, and buy now, pay later, where frictionless user experience, accessibility, and affordability are driving rapid consumer adoption. Mobile money has evolved tremendously from the time of M-Pesa's revolutionary text-based banking into cloud-based real-time payments, which are taking the world by storm.

Apple Pay is accepted at more than 85% of U.S. retailers, whereas Google Pay and Walmart-owned PhonePe carry 80% of India's United Payments Interface (UPI)-based real-time payments. And in the United States, cloud-based buy now, pay later services from the likes of PayPal, Affirm, Klarna, and AfterPay saw the total market user base grow by 81% in 2021.

All these payment innovations are chipping away at the business of incumbents. Outside the United

States, Google Pay, Klarna, and AfterPay are even offering "core" banking products such as fixed deposits, credit cards, and bank accounts. So far, incumbent banks have not really come back with a strong enough cloud-based counterattack.

Apart from the loss of revenue, banks run a real risk of missing out on the business of next-gen customers who have grown up on innovative digital-consumption, and therefore payment, experiences. In a recent survey, 60% of U.S. consumers said they would probably use point-of-sale financing (such as BNPL) within six months to a year. If traditional banks continue to rely on slow and expensive traditional payment methods, they risk losing their competitive edge before long.

### BIG UPSIDE

My view is that banks, which upped their digital-transformation plans to cope with the pandemic, are nicely positioned to explore cloud-based payments. The upside is considerable. It includes:

**Scalability:** Customer adoption, open banking, and embedded finance are some of the trends behind soaring digital-payment transaction volumes. On "special" days, like Black Friday or Singles' Day, a bank may need



# VERTICAL GO-TO-MARKET IS CRITICAL IN THE CURRENT ECONOMY. HERE'S WHY.

**ISO owners are facing a double whammy right now**, as business owners and as consumers. While there is no escaping the squeeze of rising prices, and their impacts on business and household budgets, the story doesn't end there. A well thought out and realistic go-to-market strategy can help sustain your ISO in this uncertain economic climate.

## EXAMINE YOUR PORTFOLIO

Every single merchant that makes up your portfolio was hard-earned. They stay with you for many reasons, not the least of which is your relationship, and the customer experience you deliver, providing service they won't find elsewhere.

Make no mistake though. Some of these business types will be better equipped to remain solvent no matter what the economic environment looks like. Others won't. To minimize your risk, it's prudent to examine your portfolio through this lens. How much of your business is tied to merchant categories that rely on discretionary spending?

Whether it's the majority or only a portion, your ISO will be well-served to broaden its go-to-market strategy.

## EXPLORE EMERGING VERTICALS

Consider diversifying your portfolio by entering other markets. This is a move that can help stabilize your portfolio.

If you need proof, look no further than what we learned from Covid. Hospitality and travel-related spending categories plummeted, while online ordering soared. The pandemic brought into sharp focus two key lessons.

Firstly, that anything can happen. Secondly, disposable income levels will ebb and flow, often unpredictably so.

It's really no different than the long-standing wisdom of value-based investing. Diversification is a proven strategy to weather losses and realize gains, through economic recessions and expansions.

## CHOOSE NEW MARKETS WISELY

Take the petroleum industry, as an example. It's about as recession-proof as you can get, but like anything else, you need more than enthusiasm and jumping in with both feet if you want to succeed.

It starts with educating yourself on the industry – the technical aspects but also the nuances that are less obvious, yet still critically important.

You also need to be able to speak to the pain points of the merchants in this vertical, and most importantly, have the solutions to solve for those problems. Without that last part, you won't be able to deliver positive outcomes for the merchants in that vertical, and you will lose credibility quickly.

## PARTNER WITH NIMBLE PLAYERS

Cut through the conversational noise and evaluate payment partners that bring a proven track record of thinking differently. Take time to understand prospective partners. Are you philosophically aligned? Does the potential partner have experience in the verticals you want to serve?

This just so happens also to be what we're best at – ready to talk?



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to serve several million payments. Banks' on-premise infrastructures do not have the capacity, scalability, or resilience to accommodate such numbers. But cloud has it all.

**Innovation:** Open banking has opened the doors to data exchange and collaboration with partners and third parties in a financial ecosystem. Cloud offers a platform for APIs that developers and partners can use to create further innovations. Innovators can also access a huge variety of tools and software solutions, as a service, as and when required.

**Analytics:** Cloud is where massive computation, elastic storage, and a plethora of applications come together. This is why it is the first choice of data-driven organizations. Apart from payments innovation, banks can leverage the data-and-analytics power of cloud to improve every aspect of payments, from business processes to customer experiences.

**Speed and security:** When it comes to speed, earlier methods of money transfer, such as correspondent banking, are totally outclassed

by cloud-based payments, which occur in real-time. This is why even the SWIFT payments network has embraced cloud technology. An organization like SWIFT, which processes more than 40 million transactions per day across 200 countries, was able to make the shift because today's cloud infrastructure is more secure than on-premise data centers.

Banks have often embraced an incremental approach when it comes to cloud. Many times they run a finite number of experiments to target a small set of applications—especially ones that are easier or “less risky” to migrate—and it is all understandable. After all, this slow-roll approach, marked by ‘early-wins,’ is great for creating momentum.

However, if not substantiated by a well-defined overall strategy, with plans to make the right investments and commitments that build the right foundational capabilities, these firms could end up leaving value from the cloud on the table.

This myopia also limits the scalability of initiatives and restricts the harvesting of the future value potential. The economic reality of

this situation is that every successive capability continues to cost at least as much, if not more, to migrate to the cloud or build on the cloud.

This happens because critical underlying capabilities like security and governance processes have simply been transferred to the cloud along with all the operational issues that they bring. This unfortunately accelerates the “tech debt” the cloud is creating within the IT landscape, instead of delivering valuable solutions for the business.

## MATURE AND PROVEN

Progressive organizations understand this only too well. They see that the competition in payments continues to be relentless, driven by the swelling ranks of non-traditional players. Conventional bank payments are feeling the heat from innovations in microfinance, point-of-sale financing, and mobile money, which are leveraging cloud to run their massive transactions in real-time, at affordable cost, and with great experiences.

Incumbent banks recognize the need to take their own payments to cloud, but are hanging back for various reasons. While cloud adoption has its challenges, the conditions for migration have never been better. Most banks have a foundation in place thanks to their recent transformation efforts. Also, cloud technology is mature and proven, and the emergence of multi-cloud/hybrid cloud has made vendor lock-in a thing of the past.

Banks can even work with “rivals,” such as payment processors and gateways, that offer cloud-ready solutions to help make the shift. **DT**

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