

TRENDWATCH 2.0

Q3 2019

PAYMENTS SYSTEM INDUSTRY

SYNOPSIS

Notice: Materials contained in this document are drawn from several media sources, and Dorado Industries is not responsible for their accuracy. Opinions expressed herein are presented without warranty. Brand names are the trademarks of their respective service offerors.

Contents

Random Thoughts 3

2019 Predictions 4

TrendWatch Summary: Industry Focus Areas – Q3 2019 6

TrendWatch Summary: The Players – Q3 2019 7

2019 Payments Industry YTD Yields 8

Interesting News This Quarter 9

M&A and Alliance Activity 12

Curiosities 16

Useful Links for More Information 18

Back in the Day! 19

www.doradoindustries.com
jmacallister@doradoindustries.com
(310) 544-1316

Random Thoughts

Why All the Drama?

It hasn't been but two months since the Federal Reserve Bank announced that it would enter the faster payments realm with its "FedNow" service and already the battle lines are being drawn. For their respective parts, Fed and TCH representatives have been reasonably well behaved when asked about the potential conflict of private versus public sector offerings (although TCH has reminded us that its egalitarian pricing model only works if RTP is the only market player). Congress, on the other hand, is threatening investigations into the Fed's behavior over the past four years with the Faster Payments Task Force, calling its ethics, pricing models, over-reaching market influence into question. Hell, the "make versus buy" decision hasn't even been made yet. What's the rush?

Are we going to have four years of this kvetching over a faster U.S. payments system that, so far, doesn't move the needle in terms of users or volume?

It's hard to believe that TCH thinks that smaller banks and credit unions have short memories, will forgive past sins, and willingly sign up for RTP when there might be a viable option open to them.

On the other hand, the Fed thinking that we'll all wait nearly a half-decade for FedNow to come into being seems a bit complacent too. What if it's an Edsel? The U.S. payments highway is littered with roadkill and could easily create another carcass if things go wrong.

Let's hope things calm down and we all head toward an interoperable system that speeds things up and makes them safer for consumers and businesses alike.

And Speaking of Drama

There was a time when we applauded efforts by entrepreneurs and innovators to bring something new to market. Yet, when it's Facebook doing the organizing and heavy lifting, all we get is a S-storm of blather from Capitol Hill, folks that might have an ox or two gored by Libra, and foreign central banks that wouldn't know collaboration if it walked through the front door. PayPal has already said the kitchen was getting hotter than it liked and bolted. We can expect to see others weigh the future benefits of a collectively spawned cryptocurrency against near-term reputation risk involved in staying the course. The meek will walk; if enough sheep leave Libra Association, the jig is up, and we're back to a patchwork quilt of very fallible cybercurrencies that don't buy much and are frequently hacked. Faced with the same amount of hypocritical chest-thumping by Congress, regulators, and status quo preservationists, where would Visa, Mastercard, and the EFT networks be today? Or ACH? We'd be carrying cash and writing checks.

So, what should keep legislators, bankers, processors, and merchants awake at night, you ask? New stories about multi-factor authentication schemes being hacked by AI-assisted systems operated by off-shore ne'er-do-wells. Or repeated incidents that prove time and time again that the weakest link in U.S. and global security systems surrounding our payment transactions are our people, not our tools. Rather than introduce Luddite-ish drama at every opportunity, we might consider Zen-like contemplation of the value new endeavors can bring to our industry.

Hell, the lunar landing program gave us a whole lot more than Tang. Maybe FedNow and Libra will as well.

The Holidays are coming; time to go fishing.

Until Next Time

www.doradoindustries.com
jmacallister@doradoindustries.com
(310) 544-1316

2019 Predictions

2018 Holdover: Venmo's (unnamed) P2P competitors will follow its lead and announce plans to morph into POS and mPOS services.

Q1: Haven't seen it yet, but Zelle's growth numbers continue to impress.

Q2: More of the same; staggering Zelle growth but no overt move into POS.

Q3: Does B2B count? Getting closer to C2B, month by month.

2019 is the year we will see the beginnings of mobile payments interoperability.

Q1: It's not likely that Apple Pay will make the first move considering Apple's recent entrance into the credit card arena.

Q2: Geez, this is going to take a long time. Maybe straight M&A will get it done.

Q3: Forget about it. We're raising the white flag on this one for the rest of the year!

Blockchain applications will proliferate; two global successes will be announced.

Q1: May have to eat this one in light of recent statements by bank CEOs and CTOs regarding blockchain's value being oversold. Nevertheless, over 40 central banks are working on blockchain opportunities to speed up and cheapen trans-border transactions – most involve hard-currency denominated tokens, not those derived from algorithms. Where's the fun in that?

Q2: Now we're cooking! Thank you, Libra Association.

Q3: Hold 'er Knute, not so fast. Looks like PayPal walking back their thinking while others hem and haw. Too much regulatory scrutiny perhaps.

Voice banking, a virtual assistant application, will gain in popularity despite predictions to the contrary.

Q1: U.S. Bank, Capital One, and Fiserv seem to think we're right, but voice banking is nowhere near critical mass yet.

Q2: Slowly but surely there are new skills being launched on Echo and elsewhere; but it's likely to be a long slog.

Q3: Consumer studies indicate that people are wary of voice banking yet the number of skills and tasks being cataloged continues to grow. Puzzling, right?

jmacallister@doradoindustries.com
(310) 544-1316

2019 Predictions

The Clearing House will launch its RTP system in earnest. The Fed will play catch-up.

Q1: RTP is up and running with at least one FI and TCH just added four new seats to its RTP Advisory Committee for smaller players (but no merchants).

Q2: "Catch-up" is a relative term, actually. The Faster Payments Council is going as fast as a collaborative association can and the Fed publicly applied the brakes in a May announcement. Meanwhile, RTP enrollment hasn't hit Mach 1, either.

Q3: Well, now we know the Fed's plans and we're eagerly awaiting how the markets react. Merchants, small banks and most credit unions are pleased with the idea of a public sector player operating a faster payments system. Yet, as noted in Random Thoughts, the real drama queens have yet to take the field.

The pharmaceutical industry will see another M&A transaction involving an outsider.

Q1: One can hope, drug costs are rising fast; sadly, this prediction may take a bit more time.

Q2: Pharma costs aren't center stage anymore but they're still there and high. This will happen.

Q3: It's a pretty safe bet that Purdue Pharma will be on the block soon. Depending on the level of toxicity that remains after bankruptcy, someone will come along with some money.

TrendWatch Summary: Industry Focus Areas – Q3 2019

Recent Activity Level	Industry Impact	Entrenched Player Impact	Market and Industry Situation	
			Focus Area	**Recent Movements**
Low	🔴	🔴	***New Payment Forms***	Maybe Google's new Levi's payments coat counts?
Med	🔴	🟡	***ATM Restructuring***	Cardless draining of devices is emerging; in the UK folks are demonstrating what happens when ATMs leave markets.
High	🟢	🟢	***POS Volume Trend***	According to Pulse research, POS debit volume continues to rise; more places to use our cards and we're spending more.
Low	🟡	🟡	***Legal/Regulatory Issues***	Impeachment inquiries will likely keep regulatory interference low unless you're Mark Zuckerberg
Low	🔴	🟡	***New Venture Growth***	Health care and insurance taking big bites; more funds going into M&A.
Med	🟢	🟢	***Earnings Announcements***	M&A transactions in processing sector may play big earnings kickers next quarter.
Med	🟡	🔴	***Industry Investments***	If there's another big M&A play or Visa and Mastercard continue to be accretive, there ought to be some big paydays soon.
Med	🔴	🔴	***Payments Industry Security***	20 notable breaches so far this year.

🟢 Positive
🟡 Mixed
🔴 Negative

www.doradoindustries.com
jmacallister@doradoindustries.com
(310) 544-1316

TrendWatch Summary: The Players – Q3 2019

Industry Players to Watch

Libra Association PayPal backing out and Congress piling on cannot be good for Mr. Zuckerberg's venture.

The POS Credit Sector Fintech-enabled players are getting into the POS financing game with some transactions going as low as $50.

***Apple* Card** The offering went down-market pretty quickly, didn't it? Wonder if Apple and Goldman will come clean about the real take-up numbers? Don't count on it.

FedNow The Fed is going to be making some serious decisions about how FedNow is going to network, process, and support interoperability. The downstream ramifications will hit originators and receivers alike. Probably B2B first, the rest later.

Trans-border Players Rather than consolidation as suggested last quarter, the key indicator to watch for 2019 and 2020 might be how fast the morph into full-service payments players.

Department of Justice The DoJ has teed up an investigation into potential antitrust activities conducted by Alphabet and others. Expect lots of looking, not much finding.

www.doradoindustries.com
jmacallister@doradoindustries.com
(310) 544-1316

2019 Payments Industry YTD Yields

Astute readers will note that our basket of payments equities has shrunk considerable due to the spate of M&A deals that closed during the quarter. We will have to find ways to reinvest our considerable gains for Q4. Even with First Data, WorldPay, and Total Systems out of the mix, we managed to generate nearly twice the returns generated by the full market represented by the Dow (15 percent) and S&P (18 percent). Of course, past performance is not a indicator of future returns and we're always one or two stupid moves by Capitol Hill, Sacramento, or NYC from another precipice.

Industry Player	12/31/2018	9/30/2019	Price △	Cap Value △	YTD 2019 Yield	YTD 2019 Rank
Alliance Data Systems	$150.08	$128.13	($21.95)	($1,306.03)	-15%	15
American Express	95.32	118.28	22.96	24,796.80	24%	10
Cardtronics PLC	26.00	30.24	4.24	172.57	16%	12
Discover Financial Services	58.98	81.09	22.11	10,632.70	37%	6
Euronet Worldwide	102.38	146.30	43.92	2,213.57	43%	4
Fidelity National Information Services	102.55	132.76	30.21	5,764.07	29%	9
Fiserv Inc.	73.49	103.59	30.10	4,692.59	41%	5
Everi (fka GCA)	5.15	8.46	3.31	255.20	64%	2
Jack Henry & Associates	126.52	145.97	19.45	1,631.86	15%	13
MasterCard Worldwide	188.65	271.57	82.92	10,729.85	44%	3
MoneyGram International	2.00	3.98	1.98	114.56	99%	1
PayPal	84.09	103.59	19.50	23,790.00	23%	11
Square	56.09	61.95	5.86	1,916.22	10%	14
Western Union	17.06	23.17	6.11	3,475.18	36%	7
Visa	131.94	172.01	40.07	33,895.21	30%	8

Bitcoin Closing Price	$3,671.72	$8,272.78	$4,601.06	125%

Sources: Company releases; Morningstar.com; Bloomberg.com; and Coinbase.
Notes: 2019 YTD yield excludes dividends; based on 12/31/18 and 9/30/19 closing prices.

www.doradoindustries.com
jmacallister@doradoindustries.com
(310) 544-1316

Interesting News This Quarter

Subject	Source / Date	Summary
Chase Bank	*Business Insider August*	**Chase Bank** has sent a major piece of functionality for its mobile wallet, Chase Pay, to the same ash heap as its digital bank, Finn. Chase Pay is still available to online shoppers, but the in-store feature will go dark in 2020. Despite its Herculean efforts, including a deal with Kroger and $100 million in development spend, the bank's digital wallet never reached adoption numbers worth continuing. It's been said before, innovations in payments take twice as long and cost twice as much as expected before critical mass is achieved. After four years of trying, Chase is wisely throwing in the towel.
Neobank Scorecard	*Business Insider August*	It seems prudent that bankers and merchants would keep an eye on what's happening in the U.S. financial services markets relative to upstart Neobanks. Here's a thumbnail sketch for those behind in their reading. UK-based and Axos Bank-backed **N26** is now out of beta with 100,000 customer enrolled and a fully-stocked suite of PFM services that come with a hefty price tag – between $11 and $19 per month. Paycheck advances and discounts on subscription services are included in the package. **Chime** has surpassed 5 million users. Post-money valuation is now $1.5 billion. **Aspiration** has crossed the 1 million users threshold and continues to gain traction with its "anti-Wells Fargo" promotions. **Varo Money** is a bit behind the others with 750,000 users but has received a new slug of funding ($100 million) and is in the process of applying for a national bank charter through the OCC. Varo hopes that its new no-fee overdraft program will kick things up a notch. **Moven**, a relatively old startup at eight years, lags the pack with 250,000 users. Moven pivoted a few years ago to also offer Banking as a Service (BaaS) solutions to others in addition to acting like a retail bank. So, while it's not likely that Neobanks will steamroller their way to market domination anytime soon, they shouldn't be considered trivial. For now.
Mastercard	Finextra September	Here's a novel idea, pay merchants every time they handle cashback on point of sale transactions. Seems that **Mastercard** is doing what it can to help its issuers dodge the furor caused by bank closures of ATMs throughout the UK. Starting in April 2020, retailers of all size will receive roughly 15¢ for each cashback transaction. This, in an effort to avoid torches and pitchforks being brandished by the estimated 8 million souls being disenfranchised by the same bankers who are shuttering ATMs along high streets and suburbia. It worked once in the U.S., why not the UK?
Visa	*Mobile Payments Today September*	It appears that open banking has gained a new and very large supporter – **Visa**. The card brand has inked an agreement with Revolut, Europe's largest Neobank for a broad array of payments services. Revolut will support P2P, currency exchange, and personal finance budgeting through a dedicated Visa debit card. Yet another example of how the card schemes are working feverishly to expand into "cardable" parts of the payments system.

Interesting News This Quarter

Subject	Source / Date	Summary
Amazon	*Business Insider September*	Cash remains a valuable tool for millions of Americans and no one knows it better than online retailer, **Amazon**. Effective immediately, the retailer's PayCode service will allow consumers to make online purchases with funds deposited with 15,000 Western Union locations. Amazon is trading on the experience it has gained with PayCode in 19 countries and expects to online see sales uplift as a consequence of offering the service.
Walmart	*Business Insider September*	We reported on the switch **Walmart** was making in its card cobranding and private label strategies from Synchrony to Capital One a while ago, but we didn't know at the time how rich the offerings were going to be for those opting to sign up for the cards. Walmart shoppers opting into the cobranded card get 5 percent in cash-back rewards for in-store purchases for the first 12 months and 2 percent on merchandise, travel and restaurants thereafter. Holders of the private label card get the same in-store promotion for the first year, a matching reward scheme for online purchases, 2 percent after the first year and 2 percent cash back from Walmart Fuel Stations. In short, Walmart shoppers who once held the old cobrand or private-label cards get a windfall for doing nothing. Pretty exciting.
Visa/Kroger	*Digital Transactions July*	**Visa** and **Kroger** have settled their lawsuit linked to transaction routing under EMV cards. Kroger had plans to route signature transactions usually bound for Visa to PIN EFT networks. Visa squawked, played nasty, and Kroger sued. Things are now patched up, but the terms of the settlement are confidential, so we don't know which party blinked. The wrangling between the card brand and retailer aren't nearly over because some Kroger stores (Smiths and Foods Co.) haven't been taking Visa credit cards since March. A little matter of interchange and the rate the merchant was paying. Well, half a loaf, as they say.
Cumberland Farms	*Digital Transactions July*	Meanwhile, another retailer, convenience store operator, **Cumberland Farms**, avoids the courthouse steps by using its proprietary and in-house developed SmartPay app to dodge the interchange bullet. In play for six years now, Cumberland has added a couple more payment options including a NetSpend prepaid account or a straight-up ACH transaction. Either option generates a 10¢ discount per gallon of gas purchased. Cheaper than attorney's fees, right?
Sainsbury's (UK)	*Finextra September*	UK grocer, **Sainsbury's** took a page from Amazon's playbook and opened a scan-and-go outlet branded "Pay & Go." Customers were supposed to use an app to enable product picking and self-checkout without cash, card, or device wigwag. Alas, not all pilots work out well. Sainsbury's has been forced to add two kiosks and a manned till to handle those customers wishing to shop and pay by more conventional methods. The grocer has always been an early adopter in retailing and payments but, this time, the expected number of early-adopting consumers fell short of the target. These things take time, they say.

Interesting News This Quarter

Subject	Source / Date	Summary
Green Dot Corp.	*Mobile Payments Today July*	Prepaid card legacy player, **Green Dot**, has entered the "I'll pay you more" fray started by digital-only Neobanks a few years ago. The Unlimited Cash Back Bank Account uses national retailer locations for free cash deposits (clever) has no OD fees (newly popular), has no minimum deposit requirements (curious), and charges a low, but waivable, monthly fee (hmmm). The mobile app comes with a Visa debit card and offers P2P payments, integration with the major "Pays," and a PFM module. The cash-back reward? 3 percent. Not a bad package, all things considered.
Square	*Digital Transactions September*	And on the merchant services side, **Square**, arguably the market leader in acceptance for small and micro merchants, is changing its pricing. Gone is the old 2.75 percent rate in favor of 2.6 percent plus 10¢. Students of higher math will see that larger ticket merchants will benefit while those selling lower priced goods will see their costs rise slightly. Either way, the changes are measured in single digits so don't expect to see merchants high tailing it for other providers, yet.
Pulse	*Mobile Payments Today August*	The annual **Pulse** payments study never ceases to bring out interesting facts that could shape banker and retailer views of the ecosystem. For instance, this year's survey notes that eCommerce debit transactions grew by 28 percent for 2018, five times faster than physical card transactions. We also learned that we're spending more on debit cards than before – up 8 percent year-over-year. A forward-looking nugget included in the survey is that 70 percent of the debit issuers responding plan to issue contactless cards in 2020, a response twice that of the 2017 study. Some might consider this factoids speed bumps for their planning roadmap; others might consider them on-ramps. Either way, the Pulse data remains valuable to just about all of us.
Rakuten	*Finextra July*	We've been waiting to see what mega retailers from outside the U.S. were planning and we've just received our first glimpse. **Rakuten**, known as the Amazon of Japan, plans to apply for an ILC charter for its new subsidiary, Rakuten Bank America. The Japanese retailer is injecting $400 million in capital in the venture, suggesting it plans to become a force in American consumer banking. Rest assured that the American Bankers Association is up in arms over the prospect of a new competitor being spawned; after all we already have 5,600 banks in the U.S. Not sure what the outcome will be, but the prizefight should make for good entertainment.

jmacallister@doradoindustries.com
(310) 544-1316

M&A and Alliance Activity

Buyer/Investor	Target	Payments Emphasis	Possible Strategy
Andreessen Horowitz, 40 others	Mercury	Neobank	California-based neobank, **Mercury**, get $20 million Series A funding raising the challenger's post-money valuation to $100 million. FDIC protection for deposits and such comes through Evolve Bank & Trust. Mercury has positioned itself against the start-up genre of firms striving to set the world on fire with innovative products and services. U.S. Bank, Wells Fargo, and Silicon Valley Bank do a pretty good job of servicing the same market so time will tell how long the Andreessen firm and others will back Mercury's play.
Visa, Mastercard, others	Plaid	API developer	Things were different five years ago and the thought of **Visa** and **Mastercard** investing in a firm that could potentially lead to banking companies and Fintech firms circumventing their payment rails would have been, well, unthinkable. Yet, here in 2019 the card brands are part of a $250 million Series C round resulting in a post-money valuation of $2.65 billion. Plaid claims that 25 percent of US consumers with bank accounts have connected to Plaid through an app. Clearly, we have left the days of hatred for screen-scraping and other forms of data sharing well in the distance.
NCR	D3 Technology	Online, mobile banking	**NCR**, the 135-year old company that brought the first mechanical cash register to market and owner of Digital Insight, pays an undisclosed amount for D3 Technologies in a "slightly dilutive" transaction. Already a player in the community bank and credit union digital banking space, NCR hopes to expand its "Digital First Banking" business into the larger end of the segment. D3's arrival should add some punch to NCR's plan to integrate its services across all self-service banking channels. Still, strong headwinds may prevail with players like Alkami, Q2, and Kony vying for the same market slices.
Activant Capital, Tribe Capital, others	Bolt	Online payments software	No matter which way you look, someone is trying to take bite out of eCommerce juggernaut, Amazon. For its part, **Bolt** is developing new software for smaller online retailers that will reduce the amount of time required to checkout. A host of investors have cobbled $68 million together to accelerate market expansion for its fraudulent transaction detection and payments processing systems. Bolt went public in 2018 and has conducted over 1.5 million transactions representing $1.0 billion in value with just under 100 customers. The latest round of funding brings total capital raised to $90 million. Boutique clothing stores and furniture makers represent key vertical markets.

M&A and Alliance Activity

Buyer/Investor	Target	Payments Emphasis	Possible Strategy
Generation Investment Management, Goldman Sachs, others	Remitly	International money transfer	Yes, it may appear that we're beating a dead horse but sooner or later folks are going to realize that digital money transfer players like **Remitly** are not going to stand idly by while neobanks proliferate. Remitly raises $220 million in equity and debt ($135/$85 million) based on "additional financial service offerings" which Matt Oppenheimer, co-founder and CEO says he can't get into specifics on (must be a greater talker in front of investors and lenders). The company does $6 billion in annual transactions from 16 originating countries to 44 receiving countries. This market is gaining both serious attention and high-growth players. WorldRemit and TransferWise have no trouble raising capital and are building proprietary transfer networks around the globe. All three are nudging their way toward banking licenses with TransferWise taking the first at-bat by issuing an international travel debit card for U.S. residents. There's more here than meets the eye, we think.
Warburg Pincus, TPG Capital's The Rise Fund and Gopher Asset Management	Varo Money	Neobank	Four-year old startup, **Varo Money**, makes two announcements. First, it has harvested another $100 million from the investor community, and two, it has once again applied for a banking license with the FDIC. Varo tried this gambit back in 2016 and withdrew the application in 2018. Now, with 750,000 users and $600 million in deposits, the company's general counsel believes the way forward is clearer. Bancorp Bank won't be happy if the license is issued but core processor Temenos and Visa DPS stand to see significant increases in transaction volume. Varo hopes to have things wrapped up by early 2020; probably a bit on the aggressive side given the expect blowback from U.S. legacy bankers.
U.S. Bank	BMW credit card book	Card portfolio	Noteworthy not for its size, but more its brand appeal, **BMW** has sold its relatively small book of credit card receivables to U.S. Bank and has entered into a rewards-loaded card issuing agreement. The BMW portfolio generates about $40 million in revenue per year while U.S. Bank's credit card business gins up nearly $400 million per quarter. Still, the luxury brand makes for a nice addition to the portfolio which already includes, REI, Quicken, Fry's Electronics, and Harris Teeter. Sometimes, quality wins over quantity but not often anymore. Good to see the example prove the rule.

M&A and Alliance Activity

Buyer/Investor	Target	Payments Emphasis	Possible Strategy
Mastercard	Nets	Real time B2B payments	**Mastercard** takes another step forward in the real time payments scramble by acquiring Nordic player, **Nets,** for €2.85 billion. The card brand gets the network's clearing and instant payments services and e-billing software. Some might opine that the move strengthens Mastercard's real time dominance stemming from its Vocalink asset and could signal that a serious run at U.S. real time payments is in the offing. We concur. Watch out, TCH RTP; hurry up, FedNow.
NCR	Midwest POS Solutions	Merchant Services	**NCR** continues its forward acquisition strategy in merchant services and acquires 75-year old **Midwest POS Solutions**, an ISO focused on the restaurant industry. Now, NCR gets to keep the merchant services and software fees it once shared with Midwest and the 1,000 restaurants that use the company's Aloha restaurant management and payments software. Shrewd.
General Catalyst, Sequoia, Andreessen Horowitz	Stripe	Online merchant services	Nine-year old startup, **Stripe**, loads up on another $35 million bringing is valuation to $35 billion. Global expansion is the toe tag tied to the new money, allowing Stripe to expand into eight more countries. Not a bad gig for two Irish brothers who were miffed that they couldn't find a cheap acceptance solution for their online business venture nearly a decade ago.
DoorDash	Caviar	Home delivery	Square has sold its Caviar service to **DoorDash** for $410 million, a 450 percent return on its investment made five years ago. The rich get richer. Meanwhile, Square claims that its Cash App generated $135 million in Q2 revenue. Not bad for a P2P service begun three years ago from a standing start. Legacy players ignoring the real and future potential impact from P2P services do so at their peril.
McDonald's	Apprente	Order-taking technology	Mega-burger joint, **McDonald's**, continues to invest heavily in technology to improve customer experience and bottom-line returns. **Apprente** is a two-year old Silicon Valley innovation house focused on voice-based platforms for order-entry. The key focus for the moment is order-taking accuracy at the drive-thru. It's not hard to think ahead to the help Apprente could provide to Alexa and Siri applications for Mickey D. Integration with payment-taking seems like child's play after that, right?

M&A and Alliance Activity

Buyer/Investor	Target	Payments Emphasis	Possible Strategy
U.S. Bank	Talech	POS software	Top-five bank, **U.S. Bank**, joins others of its ilk following the Fintech "buy" strategy to acquire Talech, a seven-year old POS software developer that targets the SMB market. In-focus verticals include restaurants, retailers, and professional services firms. Payments processing through its software deployments exceed $2.0 billion. A clear-cut adjunct to the bank's technology-enabled approach to merchant services and customer experience. Terms were not disclosed but Talech had raised over $20 million in funding over its short life. Look for more big banks taking the "buy" shortcut to technology integration.
Visa, Mastercard, American Express	A dozen M&A transactions	Mostly payments	We close out this M&A section with an observation. Three of the four card brands have been on a tear recently spending billions on M&A transactions. **Mastercard** has nailed down cross-border firm, Transfast, Nordic real time payments network, Nets, Transactis, a bill payment company, fraud-mitigation player, Ethoca and Vyze, the consumer POS financing house. Meanwhile, **Visa** out-bid rivals to get Earthport, another cross-border payments firm, Rambus, a company with a unique approach to non-card tokenization, Verifi, a transaction dispute technology provider, and Payworks, a software developer in POS. The two appear to be casting their nets (and bets) broadly across the payments arena in an effort to attract "cardable" transactions wherever they may be. Meanwhile, **American Express** is sticking a bit closer to home with its M&A strategy. Recent grabs include Acom Solutions, a B2B enabler and Resy Network, a developer of table management, customer loyalty, and booking software for restaurants. Additional restaurant-related purchases include LoungeBuddy and Pocket Concierge. All by way of saying that innovation ain't cheap anymore but still very necessary to survive. A word to the wise. Meanwhile, Visa and Mastercard have joined the ever-growing throng of banks, core processors, data aggregators, and the American Bankers Association in Financial Data Exchange, a consortium focused on how the U.S. version of API-enabled consumer data exchange can best be managed through standards creation, technology prioritization, and security systems. Some might argue that this is group focused on killing off the Neobank invasion; time will tell.

Curiosities

We've found a few items in our payments review that we consider mildly amusing.

Subject	Source / Date	Summary
Google/Levi's	*Pymnts.com October*	**Google** and denim pants giant, **Levi's**, are collaborating again to offer a $200 "Jacquard-enabled" payments jacket for those unwilling to flick their wrists for an Apple Pay transaction (perish the thought) or reach behind them for a leather wallet (and wrinkle my Untuckit shirt?) While some might consider paying a couple hundred bucks for a denim jacket that buys lunch something of trip down gimmick lane, Google says nay, nay, it's in the millennial sweet spot. We'll see.
Apple	*Finextra August*	From the other side of the Silicon Valley we get a warning from **Apple** about its newly released Apple Card. Seems we're being strongly advised to not store our bulletproof titanium card near denim, leather or other cards. Apple's support page states failure to follow these simple rules may result in the card experiencing permanent discoloration. The card will still work, mind you, it just won't look as good. Owners of Google's new jacket needn't worry, should they?
Cyber Events	*Finextra July*	New research conducted on data obtained by the RSM accountancy under a freedom of information request cites the fact that 819 cyber events occurred in 2018, a heady increase over 2017's 69 similar occurrences. Moreover, we've met the enemy and he is us. Seems that 18 percent of these events happened while we were making changes to our IT environments – oops. Another 19 percent hit us because of hardware or software failures and 21 percent of the events were precipitated by our trusted third-party partners. Buried inside these "event" figures are 93 "attacks," half of which were the result of phishing probes of our employees.
Bitpoint	*Finextra July*	In a miraculous instance of juxtaposing, the same trade newsletter reports that Japanese exchange **Bitpoint** closed up shop after being hit by a hot wallet attack which made $32 million in untraceable Bitcoin and XRP currencies disappear into thin air. Hard for that to happen with cash; unless you're Willie Sutton, of course.
UK Consumers	*ATM Marketplace July*	Speaking of cash, **UK consumers** tell the BritainThinks consultancy that they believe the central bank should stuff it. Seems the Payments Systems Regulator (PSR) wants to see the demise of cash within the foreseeable future. Meanwhile, 83 percent of survey respondents said they made cash payments on a weekly basis and 54 percent of the merchants surveyed accepted or preferred cash. PSR commented on the survey results by saying it hoped the work would contribute to the ongoing debate on consumer use of cash. "Bollox," as they say over there.

Curiosities

We've found a few items in our payments review that we consider mildly amusing.

Subject	Source / Date	Summary
Monzo	*Finextra August*	Probably more tragic than amusing, but UK-based and U.S.-aspiring Neobank **Monzo** has been forced to ask one-fifth of its 2.5 million customers to change their PINs. Seems some buggy software was storing PINs in a place accessible by engineers and, although the claim is that no one was compromised, the changes by a half-million customers seemed like a good thing to do. Anyone want to sign up to project manage that little task? Not us.

jmacallister@doradoindustries.com
(310) 544-1316

Useful Links for More Information

Here are some companies referenced earlier should you care to learn more about them. (This section used to be much longer. Perhaps its brevity is a function of low industry innovation or we've done payments just about every way they can be done).

Company	Role	URL
Aspiration	New challenger bank in the U.S.	https://www.aspiration.com/summit/
Bolt	Small merchant POS software	https://www.bolt.com
N26	New challenger bank in the U.S.	https://n26.com/en-us
Rakuten	Japanese retailer	https://www.rakuten.com
Stripe	Online commerce merchant services	https://stripe.com

Back in the Day!

Mobile wallets come and go. With thanks to the good people at Payments Source, we offer up this little contest. Match the failed mobile wallet with the underlying cause according to the PS researchers. There's score card below for your answers.

Mobile Wallet		Fatal Flaw identified by Payments Source	
1.	Chase Pay	A.	Consumers prefered Pingit, an app offered by the same issuer
2.	Google Wallet 1.0	B.	Three different successive names for the same service; simpler app issued by same company
3.	CurrentC	C.	Phone maker demanded that issuers join the network to access phone's secure element
4.	ISIS/Softcard	D.	Ran afoul of the Money Transmission Act; insuffienct capital
5.	BPay	E.	A card data storage app that morphed into payments without offering PCI compliance
6.	Square Wallet	F.	Unfortunate branding with telco-backing
7.	Bling Nation	G.	Integral to issuer's network; heavily promoted but too proprietary
8.	Lemon	H.	Used and NFC sticker attached to phones; banks and merchants forced to join a proprietary network
9.	FaceCash	I.	Failure to attract issuers; consumer preference for alternatives

Mobile Wallet		Your Answer
1.	Chase Pay	
2.	Google Wallet 1.0	
3.	CurrentC	
4.	ISIS/Softcard	
5.	BPay	
6.	Square Wallet	
7.	Bling Nation	
8.	Lemon	
9.	FaceCash	

The par for this course is 5.

Good luck!

jmacallister@doradoindustries.com
(310) 544-1316