



# NILSON REPORT

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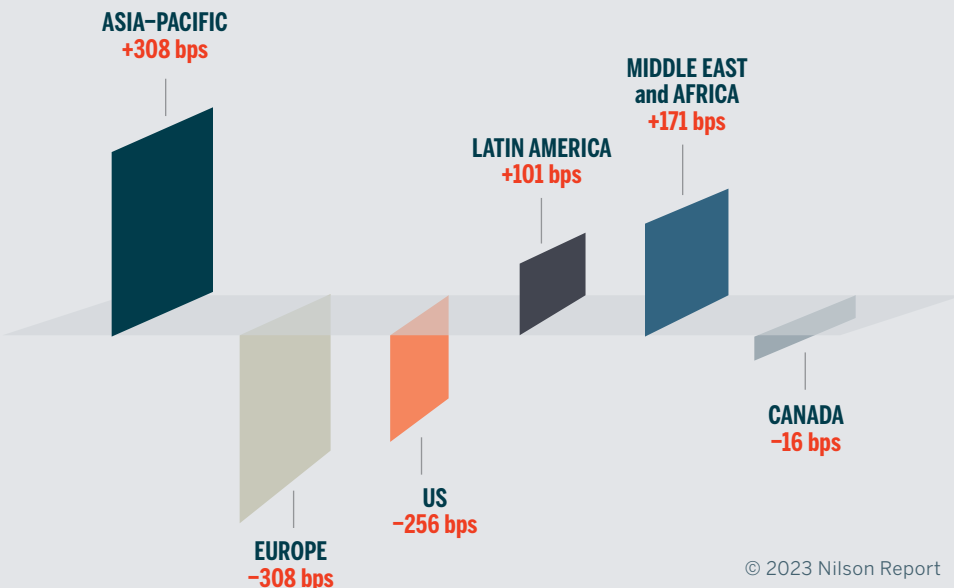
## CHANGE IN MARKET SHARES OF PURCHASE TRANSACTIONS

# Global Network Payment Card Transactions Projected Worldwide

UnionPay, Visa, Mastercard, American Express, JCB and Discover/Diners Club are projected to generate 891.20 billion transactions in 2027, an increase of 42.3% over 2022.

→ Read full article on page 5

## Five-Year Changes in Basis Points (bps) 2027 vs. 2022



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## COVER STORY

### Global Network Payment Card Transactions Projected Worldwide

The 891.20 billion transactions figure projected for global network cards does not include transactions generated by domestic-only debit and credit brands.

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**The projected increase of 42.3% over 2022 is a compound annual growth rate (CAGR) of 7.3% through 2027**

### FTC Challenges Mastercard Debit Cards

The FTC alleges that Mastercard's tokenization policy effectively locks ewallet payments to Mastercard's network.

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### M&A Activity in Merchant Processing and Acquiring in 2022

There were 122 merger and acquisition transactions in the merchant processing and acquiring sector of the payment card industry in 2022.

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In the first 9 months of 2022, purchase volume in the US grew

**14%**

### US General Purpose Card Brands through 3Q 2022

American Express, Discover, Mastercard and Visa credit, debit and prepaid cards issued in the US generated \$7.055 trillion in purchase volume from January 1 through September 30, 2022.

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### Equinix Digital Infrastructure

In business since 1998, Equinix operates 240 data centers worldwide in more than 70 metropolitan areas in 32 countries.

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### Ellipse Dynamic CVV Module

Putting the card in proximity to a POS terminal, ATM or mobile phone generates sufficient power to trigger a new 3-digit code.

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### Spectra Technologies' S1 Line

The Hong Kong-based company has launched three Android-based devices that use similar, phone-type hardware.

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### J.P. Morgan's Merchant Acquiring Services

The company's platform, which processed \$2 trillion in card payments over the last year, can handle 5,000 transactions per second.

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## REGULAR FEATURES

**p7 Digital Currency Update**

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## FEATURED IN OUR UPCOMING ISSUE

### Financing Deals in Merchant Processing & Acquiring in 2022

There were 150 transactions last year in more than 25 countries. Most of the deals were transactions for which the monetary value was not disclosed.

# First Look

News in brief on payment industry trends around the world.

**ENFUCE**, a cloud-based processor in Finland, and Welcome.Place, a neobank created in 2022 to help newcomers in France, will pilot distribution of Visa-branded prepaid cards to refugees. The cards, which are issued by Epassi, are preloaded with funds to help refugees purchase necessities. The pilot will initially focus on Ukrainian refugees who have arrived in France since the start of the war in Ukraine in February 2022. Of the 8 million people who have fled Ukraine, 120,000 have arrived in France.

Rooh Savar is CEO at Welcome.Place, roohsavar@welcome.place, www.welcomeplace.fr. Katherine Brown is VP and Head of Inclusive Impact & Sustainability at Visa, katherine.brown@visa.com, www.visa.com. Denise Johansson is Co-CEO at Enfuce, denise.koskinen@enfuce.com, www.enfuce.com.

**BLACKHAWK NETWORK** offers private label prepaid cards from Ikea US via giftcards.com, giftcardmall.com and other stores and retailers. This expands an existing partnership between the two companies that made the cards available on ikea-usa.com.

Brett Narlinger is Head of Global Commerce at Blackhawk Network, brett.narlinger@bhnetwork.com, www.blackhawknetwork.com. John Shafer is Ikea Business Leader, john.shafer@ikea.com, www.ikea.com.

## **EMVCO, the FIDO ALLIANCE and the WORLD WIDE WEB CONSORTIUM (W3C)**

have released an updated version of their document "How EMVCo, FIDO, and W3C Technologies Relate". The paper explores how the organizations work together to promote consumer privacy while ensuring a seamless ecommerce checkout experience.

Arman Aygen is Director of Technology at EMVCo, arman.aygen@emvco.com, www.emvco.com. Ian Jacobs is Head of Payment Activities at W3C, ij@w3.org, www.w3.org. Christina Hulka is COO at Fido Alliance, christina@fidoalliance.org, https://fidoalliance.org.

**UATP** announced that its UATP One merchant services business is handling some payment processing for WestJet, a UATP card issuer. UATP launched its merchant services business in 2022 to provide customized reporting with an indirect credit card processing service that connects airlines to 152 billing and settlement plans. Nuvei provides support and acquiring services for UATP One.

Nykol Kroeker is Senior Manager, Treasury Operations at WestJet, nkroeker@westjet.com, www.westjet.com. Charisse Chisolm is VP, Business Development at UATP, charisse.chisolm@uatp.com, www.uatp.com.

**BILLHOP'S** secure online bill payment platform will support UnionPay cardholders. The partnership lets UnionPay credit cardholders pay almost any bill or supplier invoice accepted by Billhop, even when their end beneficiary does not accept card payments.

Niklas Bothén is COO at Billhop, niklas.bothen@billhop.com, www.billhop.com. Han Wang is Deputy Manager at UnionPay Intl. Europe, wanghan@unionpayintl.com, www.unionpayintl.com.

**XALQ BANK** in Azerbaijan has teamed with Compass Plus Technologies to launch XalqKart Petrol and Cashback cards for loyalty and rewards.

Tural Gulubayli is Director of Business Development at Xalq Bank, t.gulubayli@xalqbank.az, www.xalqbank.az. Aleksander Kozhevnikov is Sales & Account Manager at Compass Plus Technologies, a.kozhevnikov@compassplus.com, www.compassplustechnologies.com.

**ADYEN** has launched its unified commerce solution in Japan. The platform gives businesses end-to-end control of transactions across different sales channels, enabling customer products such as click-and-collect, endless aisle and cross-channel returns.

Roelant Prins is Chief Commercial Officer, roelant.prins@adyen.com, www.adyen.com.

## **THE ACCREDITED STANDARDS COMMITTEE X9 INC.**

has published an updated version of its report titled "Quantum Computing Risks to the Financial Services Industry" denoted X9.IR-F01-2022. The 120-page document is available for download at no charge and covers the security risks likely posed by quantum computing to cryptography used by the financial services industry. For a copy of the report **click here**.

**ACI WORLDWIDE** has formed a strategic partnership with Axerve to provide ecommerce merchants in the UK, Europe and the US with payment orchestration and fraud prevention services.

Basant Singh is Global Head of Merchant Segment at ACI Worldwide, basant.singh@aciworldwide.com, www.aciworldwide.com. Alessandro Bocca is CEO at Axerve, alessandro.bocca@axerve.com, www.axerve.com.

**HIGHNOTE**, a cloud-native card issuance and program management platform, is expanding its collaboration with Visa to give digital companies focused on serving the fleet management ecosystem an opportunity to issue Visa fleet and fuel cards.

Parker Patton is Senior Director, North America Product at Visa, wpatton@visa.com, www.visa.com. John MacLwaine is CEO at Highnote, john@highnoteplatform.com, www.highnoteplatform.com.

**EXPERIAN** has launched Protect My ID in India, a dark web monitoring service that protects consumers against identity theft. Protect My ID monitors customer data 24x7 by scanning more than 600,000 online properties, including websites and blogs. When it detects stolen information such as email IDs, banking and financial details, consumers are immediately notified.

Neeraj Dhawan is Country Manager at Experian India, neeraj.dhawan@experian.com, www.experian.com.



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**CAR IQ**, which has created a payment network for vehicles that eliminates the need for physical cards to connect to merchants, has formed a partnership with BlackBerry to embed digital wallets in vehicles to pay for fuel, EV charging, tolls, parking and repairs. The BlackBerry wallet can also push offers to drivers.

Vito Giallorenzo is SVP, GM of Ivy and Head of Corporate Development at BlackBerry, [vgiallorenzo@blackberry.com](mailto:vgiallorenzo@blackberry.com), [www.blackberry.com](http://www.blackberry.com). Sterling Pratz is CEO at Car IQ, [sterling@gocariq.com](mailto:sterling@gocariq.com), [www.gocariq.com](http://www.gocariq.com).

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**WORLDLINE** has partnered with travel payment provider Fly Now Pay Later to offer BNPL through Worldline's TravelHub payment service. TravelHub offers travel merchants over 150 payment methods and currencies, multi-acquiring, tokenization and a range of fraud prevention services.

Damien Cramer is Global Head of Airlines and Travel at Worldline, [damien.cramer@worldline.com](mailto:damien.cramer@worldline.com), [www.worldline.com](http://www.worldline.com). Jasper Dykes is CEO at Fly Now Pay Later, [jasperdykes@flynowpaylater.com](mailto:jasperdykes@flynowpaylater.com), [www.flynowpaylater.com](http://www.flynowpaylater.com).

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**ANB**, will begin accepting JCB cards at all its POS and ATM locations in Saudi Arabia. The bank, which has over two million customers, has 1,160 ATMs, 290 corporate cash deposit machines and 36,670 point-of-sale terminals.

Mohammed Refaie is Head of Acquiring at ANB, [mrefaie@anb.com.sa](mailto:mrefaie@anb.com.sa), [www.anb.com.sa](http://www.anb.com.sa). Yuichiro Kadowaki is CEO, Regional Head—Middle East & Africa at JCB, [y.kadowaki@jcb-intl.com](mailto:y.kadowaki@jcb-intl.com), [www.global.jcb/en/](http://www.global.jcb/en/).

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**SHOPIFY TECHNOLOGIES** has launched a new service that will allow large retailers to select checkout and other back-office services to integrate with their own online platform. Mattel has signed and Shopify is looking for other enterprise clients. The pricing for the service, called Commerce Components, will depend on the retailer's level of customization and which components they choose to use.

Harley Finkelstein is President at Shopify, [harley.finkelstein@shopify.com](mailto:harley.finkelstein@shopify.com), [www.shopify.com](http://www.shopify.com).

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**UNO DIGITAL BANK** in the Philippines will launch the country's first numberless physical debit card. The contactless Mastercard product does not have the card number or other information printed on the card, only the cardholder's name. Cardholders also have the option to use an app to lock the card temporarily and reset the daily transaction limit. To monitor usage, an email or an SMS alert can be sent with every transaction.

Manish Bhai is CEO at Uno Digital Bank, [manish@uno.bank](mailto:manish@uno.bank), [www.uno.bank](http://www.uno.bank). Simon Calasanz is Country Manager, Philippines at Mastercard, [simon.calasanz@mastercard.com](mailto:simon.calasanz@mastercard.com), [www.mastercard.com](http://www.mastercard.com).

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**BOKIS**, a Danish payment and card company, and Nets, part of the Nexi Group, have entered into a new agreement that runs until December 31, 2029. It lets Bokis member banks continue to issue and process Dankort, the Danish domestic card, and also covers global network payment cards.

Torsten Hagen Jørgensen is Global Head of Issuing Solutions at Nexi Group, [torsten.hagen.jorgensen@nets.eu](mailto:torsten.hagen.jorgensen@nets.eu), [www.nets.eu](http://www.nets.eu). Jan Kondrup is CEO at Bokis, [jk@bokis.dk](mailto:jk@bokis.dk), [www.bokis.dk](http://www.bokis.dk).

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**AIRWALLEX** has partnered with Plaid to offer an integrated service that streamlines ACH payments and lets US customers verify bank accounts.

Tamara Romanek is Head of Partnerships at Plaid, [tromanek@plaid.com](mailto:tromanek@plaid.com), [www.plaid.com](http://www.plaid.com). Ravi Adusumilli is Global Head of Partnerships and General Manager, Americas at Airwallex, [ravi.adusumilli@airwallex.com](mailto:ravi.adusumilli@airwallex.com), [www.airwallex.com](http://www.airwallex.com).

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**CLICKATELL** has updated its Chat Commerce Platform for travel brands by reducing costs for businesses that conduct chat conversations and engage in real-time or any-time communications. Chat Desk is part of that platform. It gives travelers access to flight details, booking options, cancellations, upgrades and more via SMS, WhatsApp and Apple Messages.

Pieter de Villiers is CEO, [pieter.devilliers@clickatell.com](mailto:pieter.devilliers@clickatell.com), [www.clickatell.com](http://www.clickatell.com).

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**CORRECTION:** In issue #1232, we said that SoFi would issue one-time prepaid virtual Mastercard cards used to make payments processed by Galileo in its new BNPL service. SoFi will not be the card issuer.

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**BMO COMMERCIAL BANK** clients can now use Extend's mobile and desktop app to create, send and manage virtual cards for payment and reconciliation. BMO is the first organization to work with Extend in Canada. It will make Extend available to all corporate card clients in North America. The bank says clients can deploy virtual cards from their existing card program without any technical integration in as little as five minutes.

Derek Vernon is Head of Product Management and Enterprise Payments Modernization at BMO Commercial Bank, [derek.vernon@bmo.com](mailto:derek.vernon@bmo.com), [www.bmo.com](http://www.bmo.com). Andrew Jamison is CEO at Extend, [andrew@paywithextend.com](mailto:andrew@paywithextend.com), [www.paywithextend.com](http://www.paywithextend.com).

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**MARKETTIME** will use Balance to power mPay, an ecommerce platform for wholesale B2B suppliers, sales agencies, sales representatives and retailers. The collaboration eliminates much of the paper and manual processing involved with sales and payments. Suppliers are paid as soon as the next day after shipping. Retail buyers get instant access to net terms.

Bar Geron is CEO at Balance, [bar@getbalance.com](mailto:bar@getbalance.com), [www.getbalance.com](http://www.getbalance.com). Chris Happ is CEO at MarketTime, [chapp@markettime.com](mailto:chapp@markettime.com), [www.markettime.com](http://www.markettime.com).

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**GALILEO'S** API-enabled financial technology is being used to power Pomelo, a new payment card that allows families in the US to make it easier to offer credit to friends and family overseas by combining credit with money transfers. Galileo is owned and operated independently by SoFi Technologies.

Derek White is CEO at Galileo, [dwhite@galileo-ft.com](mailto:dwhite@galileo-ft.com), [www.galileo-ft.com](http://www.galileo-ft.com). Stefan Suarez is VP of Growth at Pomelo, [stefan.suarez@pomelo.com](mailto:stefan.suarez@pomelo.com), [www.pomelo.com](http://www.pomelo.com).



# Payment Card Transactions Projected Worldwide

UnionPay, Visa, Mastercard, American Express, JCB and Discover/Diners Club—the global network cards—are projected to generate 891.20 billion transactions in 2027, an increase of 42.3% over 2022. This is a compound annual growth rate (CAGR) of 7.3% per year.

Those card-present and card-not-present transactions will be generated by consumer and commercial credit, debit and prepaid cards. They include QR code-based payments initiated by mobile phones. The projection calls for 264.77 billion more transactions worldwide in 2027 than in 2022.

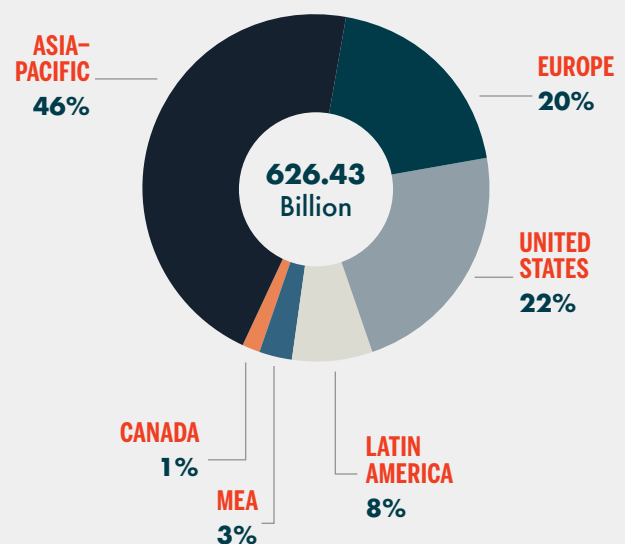
The 891.20 billion transactions figure for global network cards does not include transactions generated by domestic-only debit and credit payment card brands that function exclusively within single countries.

Domestic-only payment cards are led by RuPay (India), BC Card (South Korea), Elo (Brazil), Shetab (Iran) and Mir (Russia) and include ATH, Bancontact/Mister Cash, BankAxept, Banricompras, Cartes Bancaires, Dankort, eCash, epal/eftpos, girocard, Hipercard, Interac, J-Debit, KNet, Mada, Multibanco, Nyce, PagoBancomat, PostFinance, Pulse, Redcompra, Samsung Card, SmartPay, Star, Troy and more than 60 others.

In Asia-Pacific, global network cards are projected to generate 437.10 billion purchase transactions in 2027, accounting for 49.05% of the worldwide purchase transaction total. Transactions will be up 51.8% from 2022, which is a CAGR of 8.7%. It is projected that there will be 149.14 billion more transactions in 2027 than in 2022.

In the United States, global network cards are projected to generate 176.46 billion purchase transactions in 2027, accounting for 19.80% of the worldwide purchase transaction total. Transactions will be up 26.0% from 2022,

**Market Shares of Purchase Transactions in 2022 by Region**



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which is a CAGR of 4.7%. It is projected that there will be 36.37 billion more transactions in 2027 than in 2022.

In Europe, global network cards are projected to generate 146.78 billion purchase transactions in 2027, equal to 16.47% of the worldwide total. Transactions will be up 19.9% from 2022, which is a CAGR of 3.7%. It is projected that there will be 24.34 billion more transactions in 2027 than in 2022.

→ p6

In Latin America, global network cards are projected to generate 75.73 billion purchase transactions in 2027, an 8.50% share of the worldwide total. Transactions will be up 61.6% from 2022, which is a CAGR of 10.1%. It is projected that there will be 28.86 billion more transactions in 2027 than in 2022.

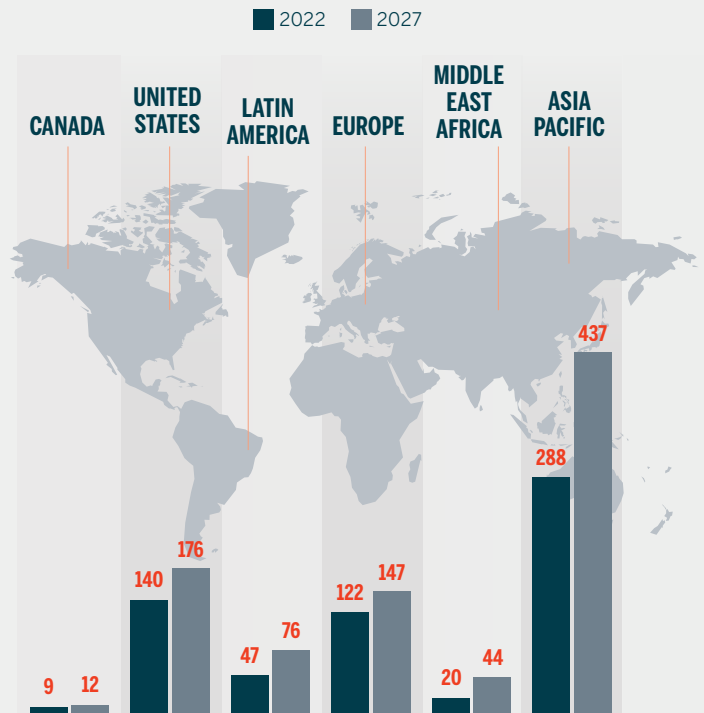
In the Middle East and Africa, global network cards are projected to generate 43.57 billion purchase transactions in 2027 and account for 4.89% of the worldwide total. Transactions will be up 118.5% from 2022, which is a CAGR of 16.9%. It is projected that there will be 23.63 billion more transactions in 2027 than in 2022.

In Canada, global network cards are projected to generate 11.57 billion purchase transactions in 2027, a 1.30% share of the worldwide total. Transactions will be up 26.6% from 2022, which is a CAGR of 4.8%. It is projected that there will be 2.43 billion more transactions in 2027 than in 2022.

Prior issues: 1211, 1189, 1167, 1145, 1123, 1101, 1078

## Purchase Transactions Worldwide

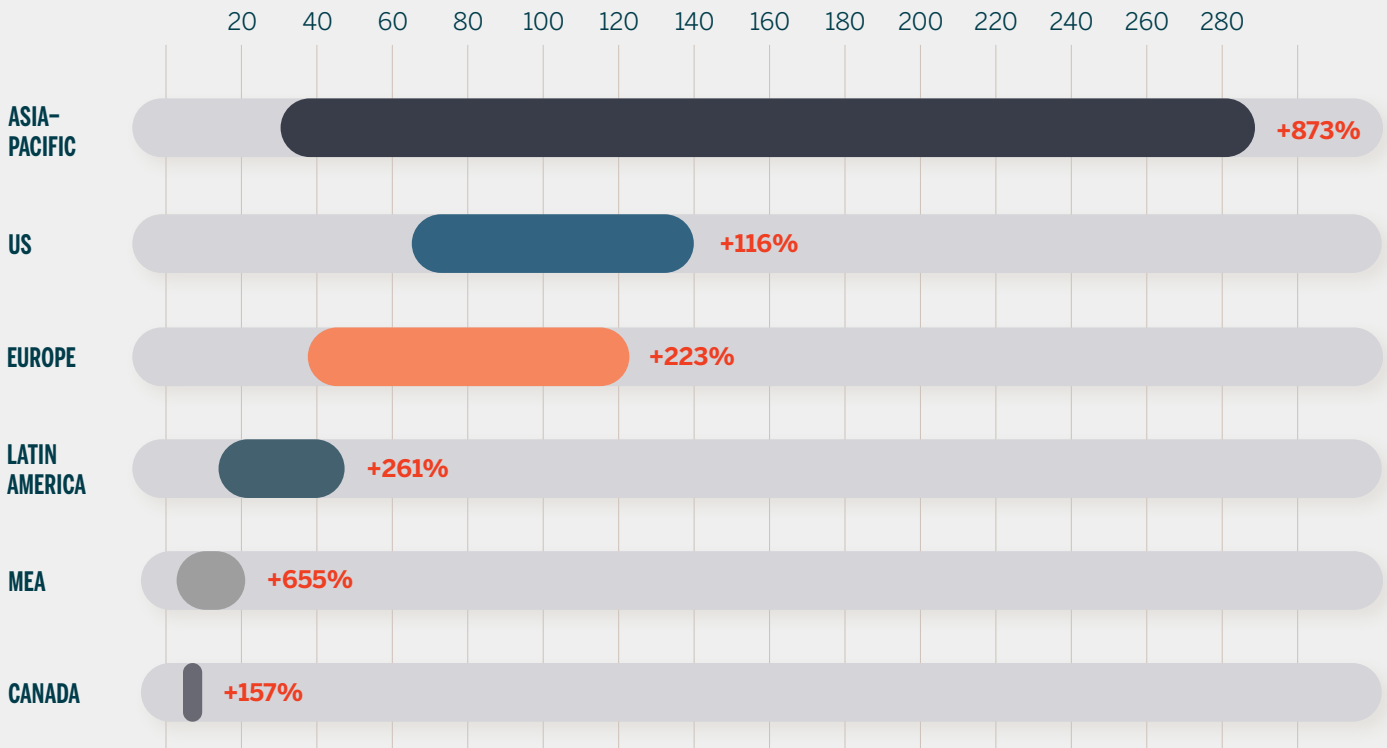
Global Brands—Projected through 2027 (Bil.)



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## Ten-Year Growth in Global Brand Purchase Transactions\*

Billions of Transactions from 2012—2022



\*Transactions include card-present and card-not-present types from consumer and commercial credit, debit and prepaid cards. Visa, Mastercard, UnionPay, American Express, Discover/Diners Club and JCB are the global brands. © 2023 Nilson Report

# FTC Challenges Mastercard

On December 23, 2022, the US Federal Trade Commission (FTC) issued an order requiring Mastercard to fully comply with the 2010 Durbin Amendment to the Dodd-Frank Act, which requires that debit card issuers enable a minimum of two unaffiliated networks on every debit card. The FTC says that the current practice of tokenizing online debit Mastercard transactions effectively locks those payments to the Mastercard network. This denies ecommerce merchants the opportunity to route payments to an alternative, less expensive network such as Star, Nyce, Pulse or Accel.

Tokens are integral to increasing the level of protection in the payment card industry. They are a unique sequence of numbers used to replace the card's primary account number (PAN). If stolen, a token has no monetary value to the thief.

Online Visa debit card transactions are also tokenized. However, since 2018, Visa has offered a detokenization service, which lets ecommerce merchants route payments to an alternative network.

## IN THIS ARTICLE



The FTC ordered that Mastercard "... shall make available a PAN for the purposes of routing to any Payment Card Network that is enabled by the Issuer on the Debit Card corresponding to that PAN. For e-commerce, card-not-present Electronic Debit Transactions, Respondent shall do so in the ordinary course, including consistent with the timeliness that Respondent provides PANs in response to requests in card-present transactions using Mastercard Tokens, and without requiring consideration for making the PAN available."

Mastercard confirms it has entered into an agreement with the FTC regarding the routing of tokenized debit card transactions at online merchants.

## Digital Currency Update The intersection of card and crypto payments

**Coinbase**, a digital currency exchange, reached a \$100-million settlement with the New York State Department of Financial Services over its AML compliance practices. Of those funds, \$50 million will be a penalty and the remaining \$50 million will be spent on compliance. The **company** also announced it would lay off approximately 20% of its workforce.

**Silvergate Capital**, which purchased the assets of Facebook's Diem digital currency product in January 2022, will lay off employees and take an impairment charge of \$196 million. The decision "...reflects the Company's belief that the launch of a blockchain-based payment solution by Silvergate is no longer imminent."

**Reap**, a finance and expense management platform with a Visa credit card product, launched cryptocurrency

repayments. An integration with Fireblocks lets Reap users settle fiat payments using Bitcoin, Ether, USDC and USDT.

**Yellow Card Financial**, a digital currency exchange, expanded access to its Yellow Pay product. Originally launched in Nigeria, Yellow Pay expanded to all African countries in which Yellow Card operates. The product lets customers send and receive money to people and merchants using Yellow Card's crypto exchange platform. Transactions are made in USDT.

The **Reserve Bank of India** launched a pilot of its retail digital rupee. Consumers will be able to make P2P and P2M payments using a digital wallet offered by participating banks and stored on mobile phones. Initially, State Bank of India, ICICI Bank, Yes Bank and IDFC First Bank will participate. Bank of

Baroda, Union Bank of India, HDFC Bank and Kotak Mahindra Bank will join the pilot later in the year.

The **European Central Bank** is seeking participants for its CBDC Rulebook development working group. Stakeholders, which include payment service providers, banks, payment institutions, e-money institutions, consumers, retailers, businesses, corporations and small- and mid-sized enterprises, can nominate people.

The **Central Bank of the Republic of Turkey** successfully tested CBDC payment transactions on the Digital Turkish Lira Network. The central bank said that it will continue to run limited, closed-circuit tests with stakeholders in the first quarter of 2023 before expanding the pilot to banks and financial technology companies.



# M&A Activity in Merchant Processing and Acquiring—2022

There were 122 merger and acquisition (M&A) transactions in the merchant processing and acquiring sector of the payment card industry during 2022. Those deals occurred in 34 countries. There were 43 deals in the US, 37 in Europe, 25 in Asia-Pacific, 7 in the Middle East and Africa, 7 in Latin America and 3 in Canada. There were 68 transactions in the first six months of 2022 and 54 in the second half of the year.

Among all 122 M&A deals, financial details were made known for only 25 transactions. The combined value of those transactions was \$7.95 billion.

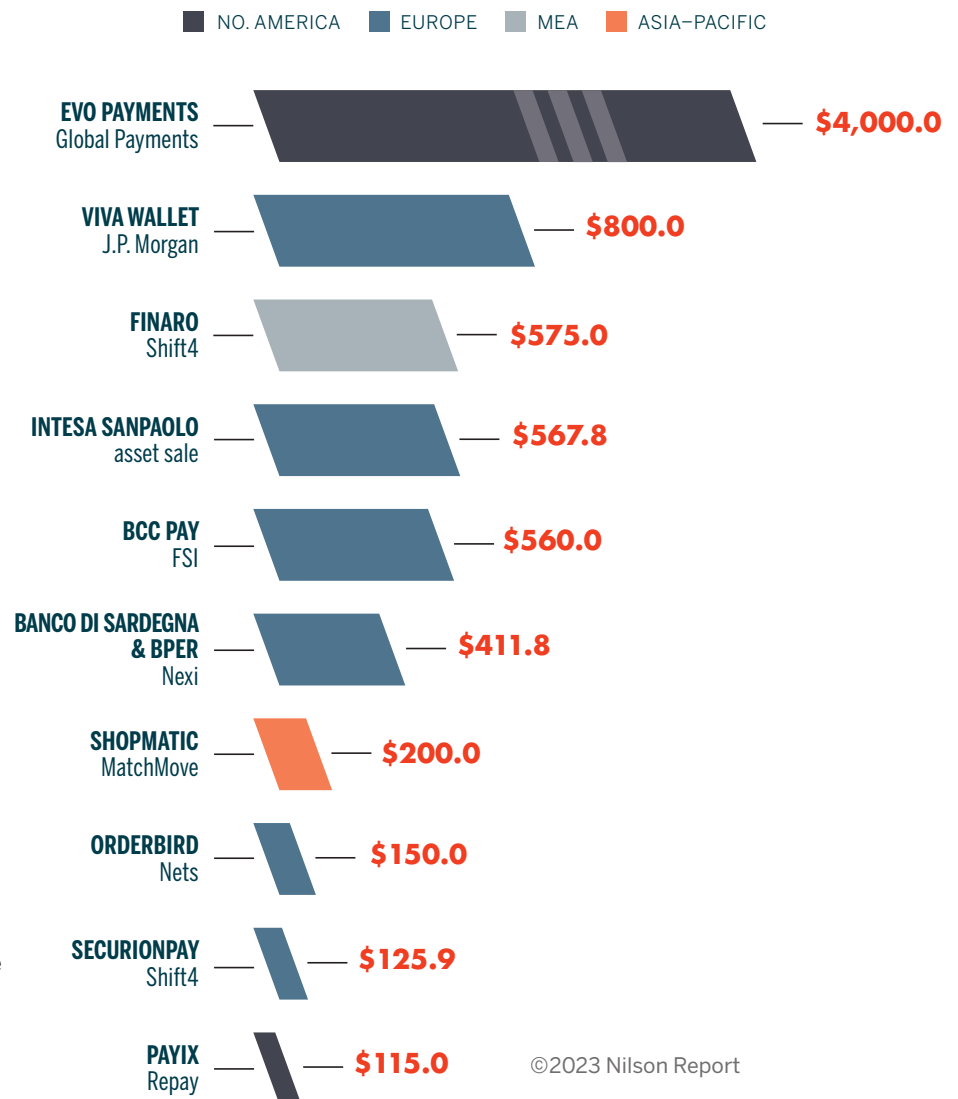
The largest transaction was the pending \$4-billion takeover of EVO Payments by Global Payments. Both companies are based in the US. Global Payments is the 5th largest merchant acquirer worldwide and EVO ranks 23rd largest based on purchase transactions processed in 2022.

The second largest deal was J.P. Morgan's investment of \$800 million to acquire 48.5% of Viva Wallet based in Greece. Viva Wallet provides processing support to merchants in 23 countries in Europe.

US-based merchant acquirer Shift4 paid \$575 million to buy Israel-based Finaro, which operates as a merchant card processor in Europe. Two deals in Italy were valued at more than \$500 million—Italian investment fund FSI purchased 60% of BCC Pay, and Intesa Sanpaolo sold its equity stake in Nexi.

## Ten Largest M&A Transactions in 2022

Among those with a reported value (Mil.)



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Prior issues: 1231, 1229, 1228, 1226, 1225, 1223, 1221, 1219, 1217, 1215, 1213

# M&A Activity in Merchant Processing and Acquiring Second Half of 2022

## Asia – Pacific

COMPANY	COUNTRY	BUYER	AMOUNT (MIL.)
<b>Cohort Go</b>	Australia	Flywire	*
<b>Mintoak</b>	India	HFDC	\$3.8
<b>NTT Docomo</b>	Japan	Bango	\$4.0
<b>Pnlink</b>	South Korea	Crypto.com	*
<b>Roamsoft</b>	India	IppoPay Technologies	*
<b>SenangPay</b>	Malaysia	Doku	\$7.5

## North America

COMPANY	COUNTRY	BUYER	AMOUNT (MIL.)
<b>Brown Paper Tickets</b>	US	Events.com	*
<b>Comm. Bankers Merch. Serv.</b>	US	Celero Commerce	*
<b>Dealer Pay</b>	US	Convenient Brands	*
<b>Deepstack Technologies</b>	US	Banc of California	\$24.0
<b>Elements</b>	US	Circle Internet Financial	*
<b>EVO Payments</b>	US	Global Payments	\$4,000.0
<b>Express Payments</b>	US	NMI	*
<b>Fuzse</b>	US	ParkHub	*
<b>Global Payroll Gateway</b>	US	Banc of California	*
<b>InComm Agent Solutions</b>	US	Real Time Technologies	*
<b>IOT Pay</b>	Canada	GrubMarket	*
<b>Linga</b>	US	PNC Financial	*
<b>LR2 (The City POS)</b>	US	Fiserv	\$26.0
<b>LR2 Group</b>	US	Fiserv	\$26.0
<b>MerchantE</b>	US	Opn	*
<b>One Payment</b>	US	Aurora Payments	*
<b>Payment Logistics</b>	US	Fortis	*
<b>PayQuick</b>	US	Green Check Verified	*
<b>Paysley</b>	US	Electronic Merchant Sys.	*
<b>Renovite Technologies</b>	US	J.P. Morgan	*
<b>Swifter</b>	US	Treez	*
<b>Three Square Market</b>	US	Cantaloupe	\$41.0
<b>Wise-Sync (Wise-Pay)</b>	US	ConnectWise	*

## Middle East and Africa

COMPANY	COUNTRY	BUYER	AMOUNT (MIL.)
<b>Digital Pay</b>	Saudi Arabia	PayTabs	*
<b>MeaWallet</b>	Latvia	SaltPay	*
<b>Nordigen</b>	Latvia	GoCardless	*
<b>Orchestrate (GetWallets)</b>	Nigeria	Bloc	*

## Latin America

COMPANY	COUNTRY	BUYER	AMOUNT (MIL.)
<b>Billpocket</b>	Mexico	Kushki	*
<b>Ding</b>	Colombia	PayU	*
<b>NetPay</b>	Mexico	Femsa	*

## Europe

COMPANY	COUNTRY	BUYER	AMOUNT (MIL.)
<b>Banco Desio merchants</b>	Italy	Worldline	\$99.5
<b>Counter Solutions</b>	UK	Givex Info. Tech.	*
<b>EveryPay</b>	Greece	Skroutz	*
<b>Intesa Sanpaolo</b>	Italy	asset sale	\$567.8
<b>Kapaga</b>	UK	Finom	*
<b>MyEUPay</b>	Poland	Straal	*
<b>Online Payment Platform</b>	Netherlands	Worldline	*
<b>Pay360</b>	UK	Access PaySuite	*
<b>Payplug</b>	France	Dalenys	*
<b>PayXpert</b>	France	Société Générale	*
<b>PensoPay</b>	Denmark	Visma	*
<b>Roqqett</b>	UK	Equals Group	\$2.7
<b>SecurionPay</b>	Switzerland	Shift4	\$125.9
<b>Sepay</b>	Netherlands	Buckaroo	*
<b>SoftPos.eu</b>	Poland	Worldline	*
<b>System Pay Services</b>	UK	BVNK	*
<b>TECS Pymt. Sys.</b>	Austria	Bluefin Pymt Sys.	*
<b>Viva Wallet</b>	Greece	J.P. Morgan	\$800.0

\* Terms not disclosed.

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# US General Purpose Card Brands through 3Q 2022

American Express, Discover, Mastercard and Visa credit, debit and prepaid cards issued in the United States combined generated \$7.055 trillion in purchase volume for goods and services from January 1 through September 30, 2022. This was an increase of 14.4% compared to the first nine months of 2021.

Purchase volume on credit cards was \$4.009 trillion, an increase of 22.8%. Credit cards accounted for 56.8% of combined credit and debit card purchase volume, which compared to 52.8% for the same period of 2021.

Purchase volume on debit cards increased 5.1% to \$3.047 trillion. Debit card purchase volume on Visa cards was \$122.78 billion higher in 2022 over 2021, up 5.9%. Debit card purchase

volume on Mastercard cards increased \$24.26 billion in 2022 over 2021, up 3.0%.

Purchase volume on Visa credit cards was \$369.21 billion higher in 2022 over the same period in 2021, an increase of 21.4%. For Mastercard credit card purchase volume was up \$193.87 billion over 2021, an increase of 25.1%. Purchase volume for American Express increased \$156.14 billion over 2021, up 24.5%, and purchase volume for Discover grew by \$24.17 billion in 2022, up 18.5%.

Visa's share of credit card purchase volume declined to 52.22% from 52.80%. Mastercard's share increased to 24.13% from 23.69%. The market share at American Express increased to 19.78% from 19.50%. Discover slipped from 4.01% to 3.87%.

## US General Purpose Cards

Jan. 1-Sept. 30, 2022, and Change vs. Jan. 1-Sept. 30, 2021

Brand/Type	Dollar Volume (bil.)						Purchase Trans.	
	TOTAL	CHANGE	PURCHASES	CHANGE	CASH	CHANGE	(BIL.)	CHANGE
Visa Credit	\$2,127.27	21.5%	\$2,093.33	21.4%	\$33.94	24.1%	22.97	16.4%
Mastercard Credit	\$993.87	25.1%	\$967.44	25.1%	\$26.43	25.2%	10.24	20.9%
American Express Credit	\$797.13	24.5%	\$793.02	24.5%	\$4.11	16.1%	5.39	20.1%
Discover Credit	\$165.324	19.1%	\$154.98	18.5%	\$10.34	30.0%	2.67	13.9%
<b>CREDIT CARD TOTALS</b>	<b>\$4,083.59</b>	<b>22.8%</b>	<b>\$4,008.77</b>	<b>22.8%</b>	<b>\$74.82</b>	<b>24.8%</b>	<b>41.27</b>	<b>17.8%</b>
Visa Debit & Prepaid	\$2,632.10	2.5%	\$2,212.31	5.9%	\$419.79	-12.1%	44.93	5.2%
Mastercard Debit & Prepaid	\$987.30	0.1%	\$834.35	3.0%	\$152.95	-13.3%	17.34	0.5%
<b>DEBIT CARD TOTALS</b>	<b>\$3,619.40</b>	<b>1.9%</b>	<b>\$3,046.66</b>	<b>5.1%</b>	<b>\$572.74</b>	<b>-12.4%</b>	<b>62.27</b>	<b>3.9%</b>
Visa Totals	\$4,759.37	10.2%	\$4,305.64	12.9%	\$453.73	-10.1%	67.91	8.7%
Mastercard Totals	\$1,981.17	11.2%	\$1,801.79	13.8%	\$179.38	-9.2%	27.58	7.2%
Visa & Mastercard Totals	\$6,740.54	10.5%	\$6,107.43	13.2%	\$633.11	-9.8%	95.49	8.3%
<b>CREDIT &amp; DEBIT TOTALS</b>	<b>\$7,702.99</b>	<b>12.0%</b>	<b>\$7,055.43</b>	<b>14.4%</b>	<b>\$647.56</b>	<b>-9.3%</b>	<b>103.55</b>	<b>9.0%</b>

Includes all consumer, business and commercial credit, debit and prepaid cards. American Express includes business from third-party issuers, prepaid and alternative payment solutions. © 2023 Nilson Report



Purchases transactions for goods and services reached 103.55 billion, an increase of 8.54 billion transactions (up 9.0%) over the first nine months of 2021.

Mastercard and Visa debit cards accounted for 60.14% of combined debit and credit card purchase transactions, a drop from 63.12% in 2021. Credit cards with Visa, Mastercard, American Express and Discover brands generated the remaining 39.86% of purchase transactions, an increase from 36.88%.

Visa debit cards accounted for 43.40% (down from 44.96%) of combined credit and debit purchase transactions. Visa credit cards accounted for 22.19% of all purchase transactions, which was up from 20.77%.



Mastercard debit cards accounted for 16.75% (down from 18.16%) of combined credit and debit purchase transactions. Mastercard credit cards generated 9.89% of all purchase transactions, which was up from 8.92%.

American Express cards accounted for 5.20% (up from 4.72%) and Discover cards had a 2.58% share (up from 2.47%).

The average purchase amount of a credit card transaction was \$97.13, up 4.2%. The average purchase amount of a debit card transaction was \$48.92, up 1.2%.

Prior issues: 1210, 1188, 1181, 1175, 1169, 1165, 1161, 1138, 1115, 1092, 1069, 1046, 1023

## Management Changes

- ▶ **Pamela Joseph** has been appointed Chief Executive Officer at Xplor Technologies, [pamela.joseph@xplortechnologies.com](mailto:pamela.joseph@xplortechnologies.com).
- ▶ **Geoff Knapp** has been appointed Chief Executive Officer at Allied Payment Network, [geoff.knapp@alliedpayment.com](mailto:geoff.knapp@alliedpayment.com).
- ▶ **Ozge Tuncel Ozcan** has been appointed Chief Customer Officer at Forter, [ozge.ozcan@forter.com](mailto:ozge.ozcan@forter.com).
- ▶ **Matthew Watson**, formerly at InComm, has been appointed Chief Technology Officer at Sionic, [watson@sionic.io](mailto:watson@sionic.io).
- ▶ **Pat Brolly**, formerly at Visa, has been appointed EMEA Head of Acquiring Platforms and Rails, Payments and Commerce Solutions at J.P. Morgan Payments, [patricia.brolly@jpmorgan.com](mailto:patricia.brolly@jpmorgan.com).
- ▶ **Christine Alemany** has been appointed Chief Marketing Officer at i2c, [calemany@i2cinc.com](mailto:calemany@i2cinc.com).
- ▶ **Chris Ruppel** has been appointed Chief Revenue Officer at Green Dot, [cruppel@greendot.com](mailto:cruppel@greendot.com).
- ▶ **Melanie Siewert** has been appointed Global Head of Marketing, Brand and Design at CellPoint Digital, [melanie.siewert@cellpointmobile.com](mailto:melanie.siewert@cellpointmobile.com).
- ▶ **Lane Dubin** has been appointed Executive Vice President and Digital Officer at CPI Card Group, [ldubin@cpicardgroup.com](mailto:ldubin@cpicardgroup.com).
- ▶ **Kevin Weber** has been appointed Global Head of Product and Payment Strategy at CellPoint Digital, [kevin.weber@cellpointdigital.com](mailto:kevin.weber@cellpointdigital.com).
- ▶ **Justin LaChance** has been appointed Chief Financial Officer at Xplor Technologies, [justin.lachance@xplortechnologies.com](mailto:justin.lachance@xplortechnologies.com).
- ▶ **Oliver Manahan**, formerly at Infineon Technologies, has been appointed Director of Engagement and Operations at EMVCo, [oliver.manahan@emvco.com](mailto:oliver.manahan@emvco.com).
- ▶ **Tim Gittins**, formerly at Moto Hospitality, has been appointed Chief Revenue Officer at Bink, [tgittins@bink.com](mailto:tgittins@bink.com).
- ▶ **Christopher Anderson** has been appointed Senior Director of Information Technology at CardFlight, [christopher.anderson@cardflight.com](mailto:christopher.anderson@cardflight.com).
- ▶ **Peggy O'Leary** has been appointed Senior Vice President, Prepaid Solutions at CPI Card Group, [poleary@cpicardgroup.com](mailto:poleary@cpicardgroup.com).

# Equinix Digital Infrastructure

In business since 1998, Equinix operates 240 data centers worldwide in more than 70 metropolitan areas in 32 countries. It provides secure, low-latency network support services to stock markets, payment card networks, central banks, national payment systems, Tier 1 banks and other clients. All top providers of cloud-based computer services are Equinix clients.

The company provides interconnection services between more than 10,000 companies and 1,250 financial institutions. Among its customers are half of the Fortune 500 and more than a third of the Forbes Global 2000.

Equinix data centers are neutral locations that operate on 95% renewable energy. It charges rent for space and power, saving companies the expense of operating their own centers, including maintaining redundancies and regular technology updates. Customers provide the software that leverages Equinix network capacity to enable faster deployment of their proprietary products and support services.

Financial services account for less than 20% of Equinix's business. However, over the last seven years, the company has pursued clients in banking and payments as opportunities were presented to provide an alternative to legacy mainframe

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EQUINIX

computer systems operated in-house and to take advantage of the steady growth in importance of APIs.

All global payment card networks except one are customers. The financial services ecosystem at Equinix protects their digital infrastructure while never seeing or touching the data.

The latest opportunity for Equinix is real-time payments. The company houses the national payment systems of 10 countries and provides customers private connectivity to the real-time payment platforms. Equinix could be the underlying platform that service providers use to build a cross-border real-time payment system.

## INTERVIEWED FOR THIS ARTICLE

Lance Homer is Global Head of Digital Payments and Banking at Equinix in South Jordan, Utah, lhomer@equinix.com, www.equinix.com.

# Ellipse Dynamic CVV Module

The EVC All-in-One module from Ellipse provides a display screen and microcontroller that can be integrated into the existing card manufacturing process to provide dynamic security code numbers that better protect against ecommerce fraud, including false declines. No battery is required.

Putting the card in proximity to a POS terminal, ATM or mobile phone generates sufficient power to trigger a new three-digit code. EMV card-present transaction data is used to generate the code.

Card issuers and their account processors don't need to make any changes to the

existing authorization process or to their hardware security modules to verify the security codes.

The modules are available directly from Ellipse as well as from SPS and Linxens, companies that provide antenna products that card manufacturers use when embedding contactless EMV-compliant chips in cards.

CompoSecure, a specialist in metal card manufacturing, offers a card with Ellipse's technology. Card manufacturer ABCorp will offer cards in the first half of 2023. G+D and other manufacturers will also produce cards this year.

## IN THIS ARTICLE



Card account processors FIS, BPC (Radar Payments) and Copayment are ready to support dynamic security code cards generated by Ellipse's technology.

Ellipse says that issuers in Canada, Mexico, Spain and the US will launch cards using its technology this quarter. Issuers in Vietnam and Tanzania will do so in the next quarter. Up to seven million Visa and Mastercard cards could be deployed worldwide this year.

Ellipse closed a \$25.5-million Series B funding round in October 2022. The company has raised a total of \$35.0 million since 2018. Proceeds of the Series B round will be used to expand its module production capacity, including building a facility in Los Angeles.

Société Générale has issued Visa cards in France embedded with dynamic security code capability powered by batteries. They use card manufacturer Idemia's Motion Code technology. The bank says that CNP fraud is almost nonexistent.

INTERVIEWED FOR THIS ARTICLE  
**Cyril Lalo** is Chief Executive Officer at Ellipse in Culver City, California, [clalo@ellipse.la](mailto:clalo@ellipse.la), [www.ellipse.la](http://www.ellipse.la).

# Spectra Technologies' S1 Line

Hong Kong-based Spectra Technologies, the 23rd largest POS terminal manufacturer worldwide, has launched three Android-based devices—the S1, S1 Plus and S1 Self-Service Kit (S1 SSK). All three use similar, phone-type hardware. S1, the base model, is a small handheld device that can be combined with peripherals. S1 Plus is a larger all-in-one handheld device that includes a thermal printer. S1 SSK is a self-service device using the same platform.

S1 devices are primarily intended for restaurants, merchants that offer pay-on-delivery services, trade shows and weekend markets. All three run on Android 12, feature 5.5-inch IPS capacitive touchscreens and use MediaTek quad-core processors. All are equipped with 1GB RAM and 8GB of

## IN THIS ARTICLE



onboard flash memory. Optional 2GB RAM and 16GB flash memory is available.

The base model S1 is equipped with a replaceable 2500mAh battery. An optional 5000mAh replaceable battery is available. Other accessories include attachable printer, 1D/2D barcode scanner and charging dock. The S1 Plus is equipped with a built-in high-speed thermal printer. Both handhelds include two cameras: a 5-megapixel rear-facing unit with a light and a 0.3 MP front-facing optic. Wireless options include 4G LTE, 3G, 2G, Wi-Fi and Bluetooth.

The S1 SSK fits an EVA-standard cutout for vending machines, self-service kiosks, automatic coffee machines, checkout counters and other self-service applications. All three S1 devices accept swipe, contactless and chip and PIN payments. Both handheld devices can accept QR code-based payments.

Spectra Technologies, which has manufactured POS terminals since 1993, expects to ship 500,000 S1 devices this year.

## INTERVIEWED FOR THIS ARTICLE

**Sam Or** is Chief Revenue Officer at Spectra Technologies in Hong Kong, [sam.or@spectratech.com](mailto:sam.or@spectratech.com), [www.spectratech.com](http://www.spectratech.com).

Prior issues: 1223, 1030, 994



The S1 base model is equipped with a replaceable 2500mAh battery.



# J.P. Morgan's Merchant Acquiring Global Expansion

Among merchant acquirers with global footprints, J.P. Morgan Payments (JPMP) stands out for the scale of its business, including the ability to provide customers with all payment processing and related products and services required, while handling all financial settlement including foreign exchange without the need of a partner.

J.P. Morgan's merchant acquiring business is a unit within the bank's Payments & Commerce Solutions business. It operates a platform that handles over 5,000 transactions per second. More than \$2 trillion in card purchase volume was processed over the last 12 months from more than 43 billion in-store and online transactions. JPMP supports merchants in over 30 countries.

In the US and Canada, the company processes payments for small, midsized and enterprise customers in-store and online. Among its customers are four million small merchants and tens of thousands of midsized merchants that bank with its parent company.

JPMP is the top merchant acquirer in the US based on payment card purchase volume. It has been the largest acquirer of card-not-present transactions for a decade. Recently, it expanded the alternative payment options it makes available to merchants through a deal with Meta, the parent company of Facebook, and billers via a deal with Mastercard.

Pay-by-Bank, available in the US, will provide ACH-based account-to-account processing as a payment option for recurring billers such as utility companies. Meta Pay, formerly Facebook Pay, will be an option for online purchases at US merchants.

In Europe, JPMP has been the largest acquirer of card-not-present transactions for the last eight years. To strengthen its position in Europe, JPMP closed on an investment to purchase a 48.5% equity stake in Viva Wallet Holdings Software Development, a cloud-based fintech that operates in 24 countries.

Viva Wallet provides onboarding, KYC and other services for small and midsized merchants. The company's omnichannel product suite includes a tap-on-phone mobile app and a payment gateway.

In Asia-Pacific (APAC), JPMP has operated for several years in Australia and India. It provides payment gateway services to multinational merchants that are its online customers in other world regions.

To better support those and other online merchants looking to expand in APAC, JPMP started offering its gateway services to businesses in New Zealand, Singapore, South Korea and Hong Kong in the fourth quarter of last year. JPMP works with local acquirers in all markets.

JPMP will support its business in the Asia-Pacific region via a recent strategic investment in India-based In-Solutions Global, which provides acquiring support services to in-store and online merchants.

Over the last two years, JPMP started offering acquiring services to ecommerce customers in Brazil.



## IN THIS ARTICLE

### J.P.Morgan

INTERVIEWED FOR THIS ARTICLE  
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Prior issues: 1229, 1219, 1215

## There were 53 mergers, acquisitions and financing deals in 25 countries in November 2022

NOVEMBER 2022

### Investments & Acquisitions

COMPANY	COUNTRY	BUYER/INVESTOR	AMOUNT (MIL.)
<b>B2B Payments</b>			
Atlar	Sweden	seed round <sup>1</sup>	\$5.3
Balance	US	credit facility <sup>2</sup>	\$350.0
Cherry	US	seed round <sup>3</sup>	\$4.0
Conferma Pay	UK	equity investment <sup>4</sup>	*
Fintecture	France	Series A <sup>5</sup>	\$25.4
nIco	El Salvador	seed round <sup>6</sup>	\$18.0
Partior	Singapore	Series A <sup>7</sup>	*
Paykii	Mexico	Tribal Credit <sup>8</sup>	*
<b>Bill Payments</b>			
PayVeda	India	Series A <sup>9</sup>	\$11.5
<b>BNPL/Alternative Funding</b>			
Blink	Egypt	debt, equity round <sup>10</sup>	\$23.7
Blink	Egypt	securitized bond <sup>11</sup>	\$8.3
FinanceEstonia	Estonia	undisclosed venture round <sup>6</sup>	\$5.8
PayZen	US	credit facility <sup>2</sup>	\$200.0
PayZen	US	equity round <sup>12</sup>	\$20.0
Wagepay	Australia	funding facility <sup>13</sup>	\$6.8
<b>Commercial Cards</b>			
Qashio	UAE	seed round <sup>14</sup>	\$10.0
<b>Fraud Fighting/Security</b>			
Featurespace	UK	government funding <sup>15</sup>	*
Nethone	Poland	Mangopay <sup>8</sup>	*
<b>Loyalty/Rewards</b>			
Appreciate Group	UK	PayPoint <sup>8</sup>	\$99.8
Boodil	UK	pre-seed round <sup>16</sup>	\$0.6
CashKaro	India	Series C <sup>17</sup>	\$15.7
Krip	Chile	Bci Bank <sup>8</sup>	*
<b>Merchant Processing/Acquiring</b>			
Adumo	South Africa	unknown venture round <sup>18</sup>	\$11.4
Atoa Payments	UK	pre-seed round <sup>19</sup>	\$2.2
Banco Desio merchants	Italy	Worldline <sup>8</sup>	\$99.5
Banked	UK	Series A <sup>20</sup>	\$15.0
Digital Pay	Saudi Arabia	PayTabs <sup>8</sup>	*
Intesa Sanpaolo	Italy	asset sale <sup>21</sup>	\$567.8
Kapaga	UK	Finom <sup>8</sup>	*
MerchantE	US	Opn <sup>8</sup>	*
NetPay	Mexico	Femsa <sup>8</sup>	*

COMPANY	COUNTRY	BUYER/INVESTOR	AMOUNT (MIL.)
<b>Merchant Processing/Acquiring (continued)</b>			
Payment Logistics	US	Fortis <sup>8</sup>	*
PensoPay	Denmark	Visma <sup>8</sup>	*
Roggett	UK	Equals Group <sup>8</sup>	\$2.7
SmartNet	Vietnam	Series A <sup>22</sup>	\$9.2
Swifter	US	Treez <sup>8</sup>	*
System Pay Services	UK	BVNK <sup>8</sup>	*
Tags Commerce	US	pre-seed round <sup>23</sup>	\$3.5
TECS Pymt. Sys.	Austria	Bluefin Pymt. Sys. <sup>8</sup>	*
<b>Mobile Payments</b>			
Beam One-Click Checkout	Singapore	seed round <sup>24</sup>	\$2.5
Goal Acquisitions (Spac)	France	Digital Virgo <sup>25</sup>	\$513.0
KodyPay	UK	pre-Series A <sup>6</sup>	\$5.0
Pyopl	UAE	Series B <sup>6</sup>	\$20.0
Yumminn	Spain	seed round <sup>26</sup>	\$1.4
<b>Money Transfers</b>			
Buckzy	Canada	Series A <sup>27</sup>	\$14.5
Zoona (Tilt Africa)	Zambia	Chipper Cash <sup>8</sup>	*
<b>Prepaid Products/Debit Cards</b>			
TreeCard	UK	Series A <sup>28</sup>	\$23.0
WeGift	UK	Series B <sup>29</sup>	\$31.0
Zest	US	seed round <sup>30</sup>	\$4.2
<b>Software</b>			
Blackthorn.io	US	growth capital <sup>31</sup>	*
Ordergroove	US	growth equity <sup>32</sup>	\$100.0
Ramani	Tanzania	Series A <sup>33</sup>	\$32.0
TouchBistro	Canada	growth financing <sup>34</sup>	\$110.5

\*Terms not disclosed. **1** Led by Index Ventures. **2** From Viola Credit. **3** Led by NFX. **4** From Mastercard. **5** Including Societe Generale Ventures. **6** Investors not identified. **7** Including Standard Chartered and JPMorgan. **8** Acquisition. **9** From SphitiCap. **10** From Emirates Intl., Sawari Ventures and local banks. **11** Underwritten by National Bank of Egypt and Banque du Caire. **12** Led by 7wireVentures. **13** From FC Capital. **14** Including One Way Ventures. **15** From the UK and US. **16** From 3B4 Investments. **17** Led by Affle Global. **18** Including Apis Partners. **19** Led by Passion Capital and Leo Capital. **20** Including Citi, National Australia Bank and Rapyd. **21** Sold its 5.1% equity stake in Nexi. **22** From Sumitomo Mitsui Banking Corp. **23** Including Not Boring. **24** Led by Sequoia Capital and Surge. **25** Merger. **26** Led by Oryon Universal. **27** Led by Mistral Venture Partners. **28** Led by Valar Ventures. **29** Including CommerzVentures. **30** Led by GV. **31** From RF Investment Partners and Level Structured Capital. **32** Led by Primus Capital. **33** Led by Flexcap Ventures. **34** From Francisco Partners.

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Message from the Publisher,

We are pleased to be back to work after a restful and enjoyable holiday season. This edition is the 1,233rd issue of the Nilson Report. We have published continuously since September 1970 and are pleased to begin another year in which we present subscribers worldwide with proprietary statistics, feature articles, brief news items and executive placement news in the payment card industry. Our sleeves are rolled up and we look forward to a prosperous 2023.

David Robertson, Publisher  
January 16, 2023