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NILSON REPORT

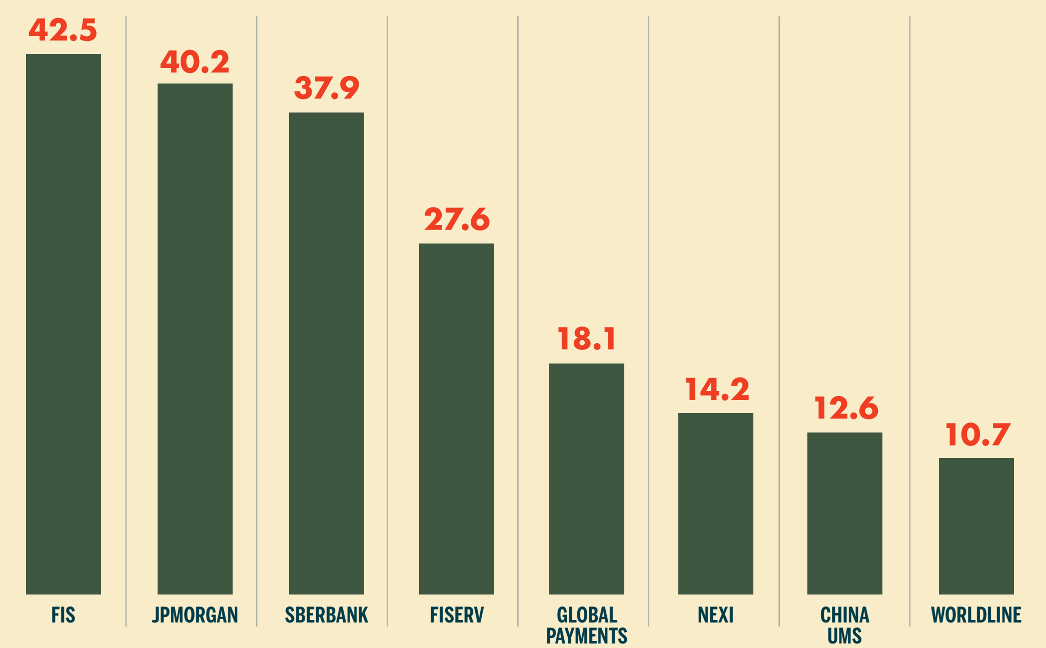
ARTICLES IN THIS ISSUE

TRANSACTIONS (BIL.) IN 2021

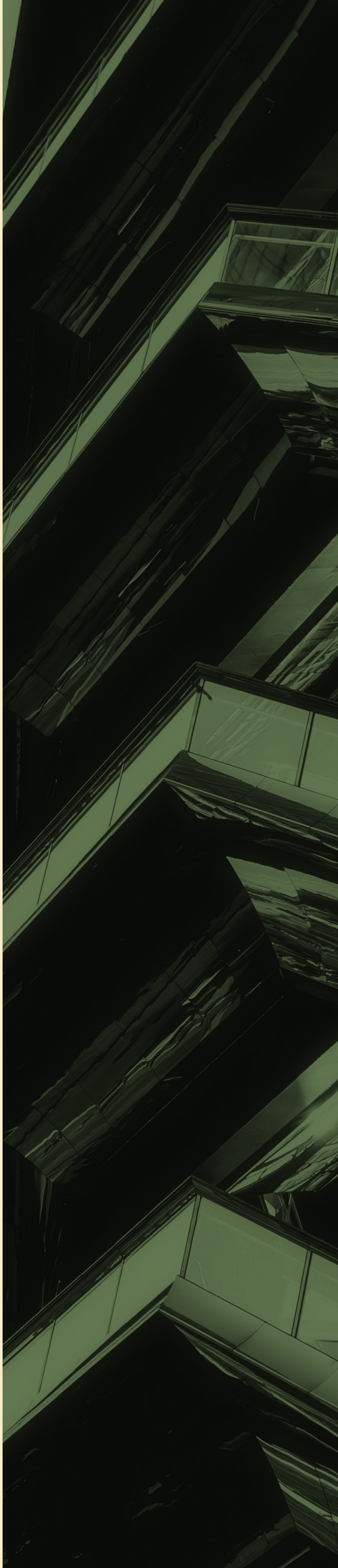
Largest Merchant Acquiring Portfolios Worldwide

The eight acquirers listed below processed 203.83 billion transactions in 2021. This represented 48.9% of transactions generated by the top 150 worldwide.

→ Read full article on page 5



FOR 52 YEARS, THE LEADING PUBLICATION COVERING PAYMENT SYSTEMS WORLDWIDE



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FEATURED IN OUR UPCOMING ISSUE

US Payment Cards Projected

Consumer and commercial credit, debit and prepaid cards are projected through 2026. Market share statistics include purchase volume, transactions, outstandings, cardholders and cards in circulation for Visa, Mastercard, American Express, Discover, private label and domestic debit networks.

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First Look

News in brief on payment industry trends around the world.

GLOBAL PROCESSING SERVICES will incorporate Featurespace's Aric Risk Hub into its suite of fraud and risk management services worldwide. Featurespace says its product improves fraud detection rates by over 70% and reduces false positives by 80%. Customers will be able to fully monitor and manage fraud alerts throughout the payment process. The product is expected to be fully available by mid-2023.

Kevin Schultz is CEO at GPS, kevin.schultz@globalprocessing.com, www.globalprocessing.com. Martina King is CEO at Featurespace, martina.king@featurespace.com, www.featurespace.com.

FISERV has partnered with IncumbentFI to offer its clients "programmable payments," a technology that allows cardholders to attach multiple funding sources to a single card and choose one for specific transactions. The new program could also include the ability to select particular reward and buy now, pay later programs, Fiserv characterizes IncumbentFI's technology as a switch that can reroute payments after they're authorized but before processing.

Sunil Sachdev is Head of Fintech and Growth at Fiserv, sunil.sachdev@fiserv.com, www.fiserv.com.

CARDLESS, a financial technology firm, will launch an American Express card for Simon, a real estate investment trust. Cardmembers will receive up to 5% back on eligible purchases at participating Simon destination retailers and up to 1.5% back on all other purchases. New cardmembers will be eligible for a bonus worth $150 in statement credits after spending $1,000 in the first 90 days.

Michael Spelfogel is President at Cardless, michael@cardless.com, www.cardless.com. Mikael Thygesen is CMO at Simon, mthygese@simon.com, www.simon.com.

CURRENT, a financial technology company that provides a Visa debit card in partnership with Choice Financial, has migrated more than four million accounts to the Visa DPS Forward platform. The migration was completed on Current's proprietary core banking platform. Visa DPS Forward combines issuer processing with a suite of APIs that integrate with digital banking products to create card programs and payment services.

Todd Brockman is SVP and Global Head of Issuing Solutions at Visa, tobrockm@visa.com, www.visa.com. Trevor Marshall is CTO at Current, trevor@current.com, www.current.com.

GOCARDLESS, a payment service provider that lets merchants collect recurring and one-time payments directly from a customer's bank account, has launched GoCardless Protect+, an end-to-end fraud prevention product. Protect+ combines machine learning and data from the billions of transactions processed on the GoCardless global bank payment network with parameters set by merchants. Enhanced payer verification, 24/7 fraud monitoring and chargeback challenges help detect and prevent fraudulent transactions.

Duncan Barrigan is CPO, duncan@gocardless.com, www.gocardless.com.

MASTERCARD virtual payment products will be linked to Cellulant's Tingg mobile wallet, which is available in 35 countries in Africa. Consumers will be able to shop online with or without a bank account through Cellulant's payment gateway. According to the GSMA, smartphone connections in Africa are expected to reach 678 million in 2023.

David Waithaka is CRO at Cellulant Group, david.waithaka@cellulant.com, www.cellulant.com. Amnah Ajmal is EVP, Market Development EEMEA at Mastercard, amnah.ajmalsharma@mastercard.com, www.mastercard.com.

AMAZON will offer its US customers PayPal's Venmo payment service as an option for orders placed on Amazon.com and the Amazon mobile app. Customers will add their Venmo account to their Amazon account and select it as the payment method during checkout. Venmo will be widely available in time for Black Friday (November 25).

Max Bardon is VP at Amazon Worldwide Payments, maxbar@amazon.com, www.amazon.com. Doug Bland is SVP and General Manager, Head of Consumer at PayPal, dbland@paypal.com, www.paypal.com.

VISA will open a state-of-the-art Innovation Center in Riyadh, Saudi Arabia. The center, which is set to be operational by the end of 2023, will feature virtual reality, biometrics and internet-of-things applications.

Andrew Torre is Regional President, CEMEA at Visa, atorre@visa.com, www.visa.com.

TRUST PAYMENTS will open contactless JCB acceptance to over 20,000 small and midsized merchants in Europe. There are 140 million JCB cardholders worldwide.

Ray Shinzawa is Managing Director, Europe at JCB, rshinzawa@jcbeurope.eu, www.jcbeurope.eu. Daniel Holden is Group CEO at Trust Payments, daniel.holden@trustpayments.com, www.trustpayments.com.

SPENDWISOR, a payment and financial services company based in Qatar, has formed a partnership with Lisnr, which provides ultrasonic proximity verification technology to enable contactless payments. Consumers will use the technology in Spendwisor's wallet and loyalty program.

Safarudheen Farook is CEO a Spendwisor, farook@spendwisor.app, www.spendwisor.app. Eric Allen is CEO at Lisnr, eric@lisnr.com, www.lisnr.com.

AMERICAN EXPRESS and Cvent, a meetings, events and hospitality technology provider, are teaming up to add complementary integration enhancements that will streamline budget management and payment processing for companies that use Amex's Corporate Meeting Card on the Cvent Event Marketing & Management platform.

Dean Henry is EVP, Global Business Financing, Payments & Digital Experiences at American Express, dean.l.henry@aexp.com, www.americanexpress.com. Anil Punyapu is SVP of Sales at Cvent, apunyapu@cvent.com, www.cvent.com.

CSG FORTE, a specialist in initiating and processing automated clearing house (ACH) payments, has launched Authenticate, an end-to-end payment security service that lets merchants verify account ownership prior to submitting items. Doing so helps reduce fraud.

Jeff Kump is Head of Payments at CSG Forte, jeffrey.kump@csgi.com, www.forte.net.

CHECKOUT.COM has launched Fraud Detection Pro, which uses machine learning to study billions of transactions that occur on its global network. That data, along with a rules engine, is used to deliver risk tools to merchants that can block fraud while identifying genuine customers. The company estimates that so far this year it has saved merchants over $1.95 billion in potential fraudulent losses.

Ido Lustig is VP of Risk and Identity Product at Checkout.com, ido.lustig@checkout.com, www.checkout.com.

WORLDPAY FROM FIS has partnered with Toss Payments, a merchant services platform, to gain access to domestic credit and debit card and alternative payment methods in South Korea. Through Worldpay, FIS processes over $2 trillion in transactions annually in more than 100 countries.

Gabriel de Montessus is Head of International Merchant Solutions at FIS, gabriel.de.montessus@fisglobal.com, www.fisglobal.com.

CARDSTREAM will integrate with Nuapay, a payment gateway owned by EML Payments, to provide open banking capabilities to its network of 200+ white-label partners. Nuapay serves 27 EU markets and the UK. Cardstream will be able to offer merchants pay now and pay In installments via Nuapay's Account-2-Account payment services.

Brian Hanrahan is CEO at Nuapay, brian.hanrahan@nuapay.com, www.nuapay.com. Adam Sharpe is CEO at Cardstream, adam.sharpe@cardstream.com, www.cardstream.com.

GR4VY will provide its cloud-native, no-code payment orchestration platform (POP) to Woolworths Group, the largest retailer in Australia and New Zealand. The POP will power Woolworths's Wpay payment platform, a standalone business launched in June 2021. Wpay handled over 1.3 billion transactions in the 12 months ended July 2022.

Paul Monnington is Managing Director at Wpay, pmonnington@wpay.com.au, www.wpay.com.au. John Lunn is CEO at Gr4vy, john@gr4vy.com, www.gr4vy.com.

MARQETA has added a portfolio of seven banking products to its card issuing platform. Marqeta for Banking provides a full set of account, ACH, instant funding and direct deposit products offered through bank partners. Businesses can access 40+ APIs to create demand deposit accounts, direct deposit with early pay, ACH with plain integration, cash loads and fee-free ATMs, bill pay and instant funding capabilities.

Simon Khalaf is CPO, skhalaf@marqeta.com, www.marqeta.com.

AUTHHUB FROM FISERV updates customer profiles as information changes and new data is collected, providing a more reliable view of behavior across all payment types and channels, including card-present and card-not-present transactions, Zelle, ACH and ATM transactions, online and mobile banking, call centers, wire transfers and electronic bill payments.

Patti Reid is VP Risk Product Strategy at Fiserv, patricia.reid@fiserv.com, www.fiserv.com.

TRUSTECH 2022, the global event dedicated to payments, identification and security, will be held from November 29 to December 1, 2022, at the Paris Expo Porte de Versailles, Pavilion 5.2. To get your free badge **click here**.

GLENBROOK PARTNERS is offering an in-person edition of its Payments Boot Camp on December 6-7, 2022, in Cupertino, California. The workshop is a thorough overview of the payment industry from the fundamentals to what's new and on the horizon. For more information **click here**.

SPLITIT will provide its white-label BNPL installment plan service to Telispire, a subsidiary of the National Rural Telecommunications Cooperative. Telispire's mobile virtual network operator customers will offer installment payments to their subscribers for devices and services.

Craig Andrew is COO at Telispire, candrew@telispire.com, www.telispire.com. Nandan Sheth is CEO at Splitit, nandan@splitit.com, www.splitit.com.

GEIDEA, a fintech platform, will partner with Visa to facilitate digital payments in Egypt. Visa will add services through Geidea's POS terminals including pay-by-phone and electronic trading.

Essam El Daly is Head of Merchant Sales and Acquiring for North Africa, Levant and Pakistan at Visa, eeldaly@visa.com, www.visa.com. Ahmed Magdy is Senior Commercial Director at Geidea Egypt, a.magdy@geidea.net, www.geidea.net.

PPRO, provider of digital payment infrastructure, has completed the rollout of its no-code service orchestration layer, which presents hundreds of payment, acquiring and risk products from dozens of providers. All can be deployed and scaled through one connection. Two new product categories available through the orchestration layer are acquiring platform as a service and risk management.

Simon Black is CEO, simon.black@ppro.com, www.ppro.com.

The Largest Merchant Acquirers Worldwide

COVER STORY

The 150 largest acquirers of general purpose credit, debit and prepaid card payments from merchants worldwide are listed here based on transactions processed in 2021. Total transactions of 416.55 billion processed by this group increased 17.9% from 2020. All transaction figures shown here are a combination of global and domestic card brands.

Among the 150 largest, acquirers from six countries hit the 1 billion transaction mark for the first time: Banorte (Mexico), Gazprombank (Russia), Banco de Sabadell (Spain), Cardnet Merchant Services (UK), PrivatBank (Ukraine) and Paysafe (US).

JPMorgan Chase's market share among the top 150 dipped to 9.7% from 10.1%. Russia-based Sberbank's share grew to 9.1% from 8.6% and Fiserv increased to 6.6% from 6.3%. New to the top 150 were Abu Dhabi Commercial (UAE), Bancard (Paraguay), Banco Nacional (Costa Rica), BankCard Services (US), Commercial Bank of California (US) and Kuwait Finance House (Kuwait).

The 10 largest acquirers collectively processed 222.01 billion transactions. They accounted for 53.3% of all transactions handled by the 150 listed here. FIS (Worldpay) remained in 1st place worldwide. Italy-based Nexi moved into 6th place from 31st owing to its acquisition of the merchant acquiring assets of Denmark-based Nets.

Worldline Group moved up to 8th from 11th largest, owing to its acquisition of a controlling stake in the acquiring business of ANZ Bank in Australia and the creation of a 51%-49% joint venture controlled by Worldline, as well as portfolios acquired from Handelsbanken in Sweden and BNL's Axepta in Italy. Adyen moved up to 11th from 21st. Santander's merchant acquiring business changed its name to Getnet in Europe and Latin America. Getnet is a part of PagoNxt, a stand-alone business created by Banco Santander to expand its merchant acceptance.

In April 2021, Samba and NCB in Saudi Arabia merged and the combined entity was named Saudi National Bank. The merchant acquiring business of First Abu Dhabi Bank in the United Arab Emirates is listed here as Magnati. The bank established that company as a wholly owned subsidiary in 2021.

The 39 US-based acquirers collectively processed 132.46 billion transactions in the US in 2021. This accounted for 31.8% of the 416.55 billion total transactions processed collectively by the top 150. Those same acquirers handled 173.16 billion transactions worldwide or 41.6% of the total handled by the top 150.

Prior issues: 1206, 1183, 1161, 1139, 1117, 1095

417 billion transactions were processed in 2021 by the 150 largest acquirers listed here

Largest 150 Merchant Acquirers Worldwide

Ranked by Global Brand and Domestic Purchase Transactions in 2021

RANK	ACQUIRER, COUNTRY	(MIL.)
1	**FIS (Worldpay)**, Group	42,456.4
2	**JPMorgan Chase**, Group	40,248.6
3	**Sberbank**, Russia	37,929.9
4	**Fiserv (First Data)**, Group	27,630.7
5	**Global Payments**, Group [1]	18,060.0
6	**Nexi Payments**, Italy [2]	14,179.0
7	**China UMS**, China [3]	12,644.9
8	**Worldline**, Group	10,677.4
9	**Wells Fargo**, Group	9,260.4
10	**Bank of America**, Group	8,927.5
11	**Adyen**, Group [4]	8,686.8
12	**Citi Merchant Services**, US	8,003.5
13	**Saman e-Pay**, Iran	7,701.7
14	**Behpardakht Mellat**, Iran	7,617.8
15	**Barclays**, UK	7,123.2
16	**Parsian e-Commerce**, Iran	7,121.6
17	**Cielo**, Group	6,865.3
18	**Elavon**, Group	6,536.8
19	**Getnet (Santander)**, Group	6,429.1
20	**BC Card**, South Korea	5,703.7
21	**Rede**, Brazil	5,564.4
22	**Credit Agricole**, France	4,211.2
23	**EVO**, Group	4,027.4
24	**Moneris**, Canada	3,995.9
25	**Credit Mutuel**, France	3,919.0
26	**Asan Pardakht Persian**, Iran	3,889.5
27	**KB Kookmin**, South Korea	3,543.9
28	**Iran Kish Credit Card Co.**, Iran	3,366.4
29	**Swedbank**, Sweden	3,323.6
30	**JCB**, Japan	3,277.3
31	**PagSeguro**, Brazil	2,949.0
32	**BBVA**, Group	2,914.0
33	**BNP Paribas**, France	2,884.0
34	**Transbank**, Chile	2,657.7
35	**BPCE**, France	2,624.5
36	**Pasargad Elec. Payment**, Iran	2,506.6
37	**VTB Bank**, Russia	2,504.6
38	**StoneCo**, Brazil	2,284.4
39	**Commonwealth Bank**, Australia	2,132.2
40	**Westpac**, Australia	1,944.1
41	**Samsung Card**, South Korea	1,890.8
42	**Societe Generale**, France	1,777.4
43	**TD Merchant Solutions**, Group	1,776.3
44	**Prisma Med. de Pago**, Argentina	1,769.2
45	**Hyundai Card**, South Korea	1,649.1
46	**Garanti Bank**, Turkey	1,569.3
47	**Mitsubishi UFJ Nicos**, Japan	1,492.2
48	**Sadad Electronic Payment**, Iran	1,492.0
49	**UniCredit Group**, Italy	1,482.7
50	**Yapi Kredi Bank**, Turkey	1,475.3
51	**National Australia Bank**, Australia	1,404.1
52	**Raiffeisen Bank**, Austria	1,298.8
53	**Absa Bank**, South Africa	1,216.8
54	**T. Isbank**, Turkey	1,213.1
55	**Aeon Financial Service**, Japan	1,176.4
56	**Banorte**, Mexico	1,107.1
57	**Gazprombank**, Russia	1,092.9
58	**Banco de Sabadell**, Spain	1,068.6
59	**Cardnet Merchant Services**, UK	1,062.7
60	**PrivatBank**, Ukraine	1,032.6
61	**Paysafe**, US	1,008.2
62	**Akbank**, Turkey	843.6
63	**Credit Saison**, Japan	833.7
64	**SBI Payment Services**, India	833.0
65	**Merrick Bank**, US	745.9
66	**Nedbank**, South Africa	735.1
67	**CSOB**, Czech Republic	734.4
68	**No. American Bancard**, US	732.7
69	**BAC Credomatic Network**, Group	691.0
70	**First National Bank**, South Africa	676.4
71	**Priority Technology Holdings**, US	666.3
72	**Shift4 Payments**, US	653.8
73	**Alfa Bank**, Russia	638.3
74	**La Banque Postale**, France	621.7
75	**Truist Financial**, US	616.2
76	**Unicre**, Portugal	598.2
77	**Network International**, UAE	587.9
78	**Tinkoff Bank**, Russia	581.8
79	**PNC Merchant Services**, US	560.4
80	**Vakifbank**, Turkey	524.1
81	**Evertec Group**, Puerto Rico	491.4
82	**SABB**, Saudi Arabia	485.1
83	**Standard Bank**, South Africa	460.8
84	**Payroc WorldAccess**, Group	460.3
85	**Market Pay**, France	459.9
86	**Russian Standard Bank**, Russia	444.0
87	**Finaro (Credorax)**, Malta	440.4
88	**CTBC**, Taiwan	426.7
89	**Niubiz**, Peru	386.1
90	**Riyad Bank**, Saudi Arabia	375.3
91	**T. Halk Bankasi**, Turkey	368.3
92	**Vero**, Brazil	366.1
93	**Bancolombia**, Colombia	354.9
94	**PostFinance**, Switzerland	329.0
95	**Tyro**, Australia	326.9
96	**Promsvyazbank**, Russia	324.0
97	**Electronic Payments**, US	323.7
98	**Banco Davivienda**, Colombia	323.0
99	**HDFC**, India	312.8
100	**Al Rajhi Bank**, Saudi Arabia	311.9
101	**First American Pymnt Sys.**, Group	301.0
102	**Axis Bank**, India	297.1
103	**Orient Corp.**, Japan	296.6
104	**Mashreq Bank**, UAE	283.8
105	**Saudi National Bank**, Saudi Arabia	275.7
106	**Alpha Bank**, Greece	270.5
107	**National Bank**, Greece	255.6
108	**Xplor Technologies**, US	254.8
109	**Nuvei Technologies**, US	219.7
110	**Key Merchant Services**, US	217.4
111	**QNB Finansbank**, Turkey	214.1
112	**Card Complete**, Austria	211.6
113	**T.C. Ziraat Bankasi**, Turkey	211.1
114	**Denizbank**, Turkey	209.8
115	**Magnati (FAB)**, UAE	205.0
116	**Sicredi**, Brazil	204.1
117	**Kasikornbank**, Thailand	203.7
118	**Izipay (Proc. Med. de Pago)**, Peru	195.3
119	**Valitor**, Iceland	190.3
120	**Titanium Payments**, US	186.3
121	**i3 Verticals**, US	185.8
122	**Turk Ekonomi Bankasi**, Turkey	180.7
123	**SEB Group**, Estonia	180.0
124	**Bank Mandiri**, Indonesia	169.4
125	**NCCC**, Taiwan	165.6
126	**SaltPay (Borgun)**, Iceland	165.0
127	**TabaPay**, US	156.3
128	**Redwood Merchant Serv.**, US	155.8
129	**Intuit**, US	153.6
130	**VisaNet**, Guatemala	138.9
131	**CardNet**, Dominican Republic	138.8
132	**Hang Seng**, Hong Kong	138.7
133	**Epicor Software**, US	138.4
134	**Celero Commerce**, US	126.5
135	**NCR**, US	125.2
136	**Paya**, US	123.7
137	**Kuwait Finance House**, Kuwait	123.6
138	**Millennium BCP**, Portugal	119.0
139	**CMI**, Morocco	115.3
140	**Scotiabank**, Group	110.2
141	**JCC Payment Systems**, Cyprus	109.3
142	**Capitec**, South Africa	98.6
143	**Serv. Digitales Pop.**, Dominican Rep.	96.5
144	**Aurora Payments**, US	96.5
145	**Commercial Bank of California**, US	96.1
146	**Abu Dhabi Commercial**, UAE	93.1
147	**United Merchant Serv.**, US	81.9
148	**Bancard**, Paraguay	80.7
149	**BankCard Services**, US	80.4
150	**Banco Nacional**, Costa Rica	79.5

Ranked by all purchase transactions (Visa, Mastercard, UnionPay, Amex, Discover, JCB, Diners Club and domestic-market-only) by country. Group includes transactions from all countries in which the company is an acquirer. **1** Estimate. **2** Includes Denmark. **3** Includes Hong Kong and Macau. **4** Includes business in Europe and US only.

Shopper Cash Rewards Visa Card from U.S. Bank

Cardholders who sign up for the U.S. Bank Shopper Cash Rewards Visa Signature Card are given the opportunity to receive 6% cash back on purchases made at 2 retailers they select from among 24 linked to the card.

The 24 retailers connected to Shopper Cash Rewards are in the home improvement, consumer electronics, fashion, gasoline, wholesale club and general merchandiser industries. Cardholder choices can be revised every quarter.

U.S. Bank, the 7th largest credit card issuer in the US, is promoting the card at its branch offices, through direct mail solicitations, online and in-app.

When select cardholders make contactless transactions, the issuer's corporate logo, which is printed on the front of the metal Shopper Cash Rewards card, lights up in blue. That feature is part of a pilot test of embedded LED technology.

The card doesn't have a battery. Instead, it absorbs electricity from the near-field-communication exchange when it is in proximity to the POS terminal.

U.S. Bank is the first credit card issuer to use LED technology. In time, it hopes all Shopper Cash Rewards Visa credit card customers will have LED cards.

Cardholders earn 5.5% cash back on lodging and car rentals booked through the U.S. Bank Rewards Center, up to 3% cash back on their top choice between gas stations and EV charging stations, wholesale clubs or bill payments and 1.5% cash back on all other purchases.

Redemption options for cash-back points include a credit added to monthly card statements or a deposit into a U.S. Bank demand deposit or savings account.

Idemia, the second largest payment card manufacturer worldwide, was first to market with an LED card. It supplied the technology in a PVC plastic prepaid card last year in Singapore to gaming company Razer Fintech. Idemia is not the supplier of Shopper Cash Rewards cards.

The U.S. Bank logo lights up when the card is in proximity to a POS terminal

IN THIS ARTICLE

usbank

INTERVIEWED FOR THIS ARTICLE

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Prior issue: 1227

← Shopper Cash Rewards Visa Card from U.S. Bank

Payment Card Shipments

Payment cards shipped by the manufacturers listed here totaled 4.47 billion in 2021. Included in the 2021 shipment figures were 3.73 billion chip cards and 638.9 million magnetic-stripe-only cards.

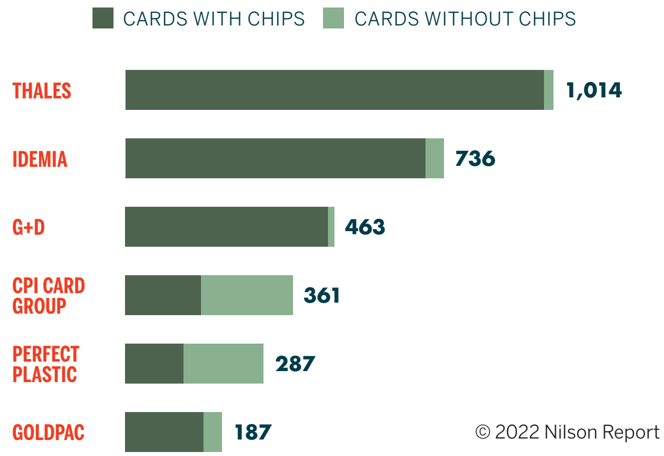
These manufacturers shipped another 94.5 million cards that used barcodes, scratch-off or other means to initiate transactions but which lacked either chips or magstripes.

The top six manufacturers combined shipped 3.05 billion payment cards in 2021, a decline of 0.9% from 2020. Their shipments included 2.50 billion chip cards and 483.0 million magstripe cards. Chip cards accounted for 82.04% of the group's total compared to 80.45% in 2020.

Included in the payment cards counted in this survey are the high-security-type credit, debit and prepaid with global brands—UnionPay, Visa, Mastercard, American Express,

Top Manufacturers of Payment Cards

Ranked by Shipments in 2021 (Millions)



Payment Card Shipments by Manufacturer—2021

Rank	Manufacturer, Headquarters	Total (Mil.)	Payment Cards with Chips[1] Rank	Payment Cards with Chips[1] (Mil.)	Payment Cards with Chips[1] % of Total	Mag-Stripe (Mil.)
1	**Thales**, France [2]	1,014.0	1	989.0	97.5%	–
2	**Idemia**, France	736.0	2	697.0	94.7%	39.0
3	**G+D Mobile Security**, Germany	463.0	3	450.0	97.2%	13.0
4	**CPI Card Group**, US [3]	361.0	5	133.1	36.9%	188.4
5	**Perfect Plastic Printing**, US	287.0	11	91.4	31.8%	195.6
6	**Goldpac**, Hong Kong	187.1	4	140.1	74.9%	46.9
7	**Valid**, Brazil, US, Spain	146.3	6	124.4	85.0%	21.9
8	**Fiserv**, US	134.6	15	53.5	39.7%	81.1
9	**Beautiful Card**, Taiwan [4]	121.5	8	102.7	84.5%	3.2
10	**XH Smart Tech**, China	111.0	7	110.5	99.6%	0.4
11	**Eastcompeace**, China	103.9	10	98.7	94.9%	5.3
12	**Tianyu Inform. Industry**, China	99.9	9	99.8	99.9%	0.1
13	**Hengbao**, China	74.1	12	73.5	99.1%	0.6
14	**MCT Cards & Technology**, India	60.5	13	58.1	96.0%	2.4
15	**Alioth**, Russia	56.0	14	56.0	100.0%	–
16	**Toppan**, Japan	44.2	17	43.1	97.5%	1.1
17	**NovaCard**, Russia [5]	44.2	16	43.7	98.9%	0.5
18	**AustriaCard**, Austria	39.3	18	37.8	96.2%	1.5
19	**Thomas Greg & Sons**, Brazil	37.6	19	36.8	97.8%	0.8
20	**Tag Systems**, Andorra	31.1	20	31.1	100.0%	–
21	**Kona I**, South Korea	30.9	21	30.9	100.0%	–
22	**Toppan Gravity**, UAE	30.2	22	24.2	79.9%	6.1
23	**PGP Group**, Hong Kong [6]	28.1	32	10.0	35.6%	13.5
24	**Exceet Card**, Germany	22.0	24	20.5	93.2%	1.5
25	**CompoSecure**, US	22.0	23	22.0	100.0%	–
26	**JallCard**, Brazil [7]	18.7	33	8.5	45.5%	0.5

Rank	Manufacturer, Headquarters	Total (Mil.)	Payment Cards with Chips[1] Rank	Payment Cards with Chips[1] (Mil.)	Payment Cards with Chips[1] % of Total	Mag-Stripe (Mil.)
27	**KL Hi-Tech Secure Print**, India	18.3	25	18.3	100.0%	–
28	**Masria Digital Payments**, Egypt	16.8	26	16.6	98.5%	0.2
29	**Inkript Cards**, Lebanon	15.2	27	13.7	90.2%	1.5
30	**Hogier Gartner & Cia**, Colombia	13.7	28	13.5	98.5%	0.2
31	**MK Smart**, Vietnam	13.3	29	12.8	95.9%	0.6
32	**TGS Card Solutions**, Mexico	12.8	30	12.4	97.1%	0.4
33	**United Security Printing**, UAE	12.1	40	3.4	28.5%	8.6
34	**Feitian Technologies**, China	10.6	31	10.6	100.0%	–
35	**Chanwanich Security Print.**, Thailand	8.5	35	7.4	86.8%	1.1
36	**Foongtone Technology**, Taiwan	7.7	34	7.7	99.8%	<0.1
37	**Colorplast**, India	6.6	36	6.6	100.0%	–
38	**Watchdata**, China	5.9	37	5.9	100.0%	–
39	**Logikard**, Ecuador	5.0	39	4.1	81.1%	0.9
40	**Taiwan Name Plate**, Taiwan	4.6	38	4.4	95.5%	0.2
41	**M-Tech Innovations**, India [5]	4.2	41	3.4	81.3%	0.8
42	**Golden Chip**, Saudi Arabia	3.1	42	2.5	81.2%	0.6
43	**Toppan Forms**, Hong Kong [8]	2.2	43	2.2	100.0%	–
44	**Beijing Huahong IC Design**, China	1.2	44	1.2	100.0%	–
45	**INCM**, Portugal	0.6	45	0.4	59.7%	0.3

1 Chip card types include dual interface, microprocessor, memory and contactless. **2** Includes 98.0 million shipped to other manufacturers. Includes 25.0 million nonchip/nonmagstripe cards. **3** Includes 39.5 million nonchip/nonmagstripe cards. **4** Includes 0.4 million shipped to other manufacturers. Includes 15.6 million nonchip/nonmagstripe cards. **5** Includes less than 0.1 million nonchip/nonmagstripe cards. **6** Includes 4.6 million nonchip/nonmagstripe cards. **7** Includes 9.7 million nonchip/nonmagstripe cards. **8** Includes less than 0.1 million shipped to other manufacturers.

Discover, JCB, Diner Club and Maestro. In addition, ATM-only cards that access deposit accounts (current accounts) and domestic-market-only general purpose credit, debit and prepaid cards are included in the high-security products counted here.

Payment cards also include retail, petroleum, medical, airline and other private label credit and debit cards. Prepaid private label cards are not included here.

In an upcoming issue, shipment figures by manufacturer will be presented for other types of cards: SIM cards, prepaid phone cards and other telephone cards; transportation/ticketing cards; private label prepaid; as well as nonpayment cards used for access, identification, membership, driver's licenses, healthcare, promotions, etc.

Other High Security[1]

RANK	CARD MANUFACTURER	Total (MIL.)	Chip (MIL.)
1	CPI Card Group	73.6	0.1
2	XH Smart Tech	61.8	61.8
3	MCT Cards & Technology	29.3	27.3
4	Alioth	21.4	21.4
5	Thomas Greg & Sons	17.8	17.8
6	Kona I	16.2	16.2
7	Perfect Plastic Printing	15.8	10.5
8	KL Hi-Tech Secure Print	14.6	14.6
9	PGP Group	12.7	1.4
10	NovaCard	12.2	12.1
11	United Security Printing	8.9	0.9
12	MK Smart	8.1	7.6
13	Valid	8.0	8.0
14	Goldpac	6.7	5.2
15	M-Tech Innovations	3.1	3.1
16	TGS Card Solutions	2.6	2.2
17	Masria Digital Payments	2.5	2.5
18	Foongtone Technology	2.4	2.4
19	Inkript Cards	2.3	2.0
20	Fiserv	2.1	–
21	Toppan Gravity UAE	1.8	1.3
22	Tag Systems	0.8	0.8
23	Beautiful Card	0.7	0.2
24	Watchdata	0.6	0.6
25	AustriaCard	0.5	0.5
26	Hogier Gartner & Cia	0.4	0.4
27	Taiwan Name Plate	0.3	0.3
28	Chanwanich Security Print.	0.3	0.3
29	Colorplast	0.1	0.1
30	Tianyu Inform. Industry	0.1	0.1
31	Toppan Forms (Hong Kong)	<0.1	<0.1

1 Includes high-security cards such as American Express, Diners, Discover, JCB, Elo, RuPay, Mir and ATM and PIN-based debit.

Visa and Mastercard

RANK	CARD MANUFACTURER	Total (MIL.)	Chip (MIL.)
1	Thales[1]	1,014.0	989.0
2	Idemia[1]	736.0	697.0
3	G+D Mobile Security[1]	463.0	450.0
4	CPI Card Group	279.0	132.6
5	Perfect Plastic Printing	257.4	80.9
6	Fiserv	132.5	53.5
7	Valid	114.3	103.4
8	Beautiful Card	102.8	100.1
9	Toppan	39.9	39.9
10	XH Smart Tech	38.4	38.0
11	Alioth	34.0	34.0
12	AustriaCard	33.7	33.0
13	MCT Cards & Technology	31.3	30.8
14	NovaCard	31.3	31.0
15	Tag Systems	30.3	30.3
16	CompoSecure[1]	22.0	22.0
17	Goldpac	21.0	7.4
18	Toppan Gravity UAE	20.8	19.3
19	Exceet Card	20.0	20.0
20	Thomas Greg & Sons	15.1	14.9
21	Kona I	13.7	13.7
22	Hogier Gartner & Cia	13.3	13.1
23	Masria Digital Payments	12.8	12.7
24	Inkript Cards	12.1	11.5
25	Eastcompeace	12.0	7.7
26	TGS Card Solutions	10.2	10.2
27	Colorplast	6.4	6.4
28	Chanwanich Security Print.	6.0	6.0
29	Watchdata	5.4	5.4
30	MK Smart	5.2	5.2
31	Foongtone Technology	5.2	5.2
32	JallCard	4.0	4.0
33	Logikard	3.9	3.9
34	Tianyu Inform. Industry	3.8	3.8
35	KL Hi-Tech Secure Print	3.7	3.7
36	United Security Printing	3.2	2.5
37	Golden Chip	3.1	2.5
38	Taiwan Name Plate	2.8	2.6
39	Toppan Forms (Hong Kong)	1.7	1.7
40	Hengbao	1.2	1.1
41	M-Tech Innovations	0.4	0.4
42	INCM	0.3	0.3

1 Includes all cards for its financial clients (not just Visa and Mastercard).

Prior issues: 1209, 1187, 1166, 1163, 1143, 1139, 1121, 1116

UnionPay

RANK	CARD MANUFACTURER	Total (MIL.)	Chip (MIL.)
1	Goldpac	141.7	126.5
2	Tianyu Inform. Industry	92.1	92.0
3	Eastcompeace	92.0	90.9
4	Hengbao	72.9	72.4
5	XH Smart Tech	4.3	4.3
6	Kona I	1.0	1.0
7	Chanwanich Security Print.	0.9	0.9
8	M-Tech Innovations	0.8	–
9	Toppan Forms (Hong Kong)	0.5	0.5
10	Feitian Technologies	0.4	0.4
11	NovaCard	0.3	0.3
12	Toppan Gravity UAE	0.2	0.1
13	Alioth	<0.1	<0.1

Other Payment[1]

RANK	CARD MANUFACTURER	Total (MIL.)	Chip (MIL.)
1	Valid	24.0	13.0
2	Beautiful Card	18.0	2.4
3	Goldpac	17.7	1.1
4	PGP Group	15.4	8.6
5	JallCard	14.7	4.5
6	Perfect Plastic Printing	13.8	–
7	Feitian Technologies	10.2	10.2
8	CPI Card Group	8.3	0.4
9	Toppan Gravity UAE	7.5	3.5
10	XH Smart Tech	6.5	6.5
11	AustriaCard	5.0	4.3
12	Thomas Greg & Sons	4.7	4.1
13	Toppan	4.3	3.2
14	Tianyu Inform. Industry	4.0	4.0
15	Exceet Card	2.0	0.5
16	Masria Digital Payments	1.6	1.4
17	Taiwan Name Plate	1.5	1.5
18	Chanwanich Security Print.	1.2	0.1
19	Beijing Huahong IC Design	1.2	1.2
20	Logikard	1.1	0.2
21	Inkript Cards	0.8	0.2
22	Alioth	0.6	0.6
23	NovaCard	0.5	0.3
24	INCM	0.3	0.1
25	Foongtone Technology	0.1	0.1

1 Includes other payment cards such as retail, oil, airline, fleet, medical, etc.

← Card Manufacturer Shipments

Hundreds of billions of reward points worldwide need more convenient redemption opportunities

Paying with Points at Checkout

Engage People is building a pay with points (PWP) network in the US that links retailers and their payment processors with participating program managers that issue reward points tied to credit cards. Retailers and processors connected to Engage People are Amazon, Fiserv and FreedomPay. Loyalty program managers connected are Bilt Rewards, HSBC and PayPal.

PWP gives card issuers increased redemption opportunities for the points they award. Engage People says early research suggests that 70% of loyalty program members will redeem multiple times a year with PWP and that inactive members become active once the convenience of PWP is experienced.

Engage People's Access Rewards platform identifies loyalty club members from a file it manages for program providers. Available points can be displayed to the cardholder, who can use them for all or part of their purchase.

Engage People does not store payment card primary account numbers or any personally identifiable information. All information is encrypted after enrollment. A unique identifier for each cardholder is used for subsequent transactions.

Sometime next year, Engage People will be able to facilitate PWP transactions for private label loyalty programs operated by airlines and hotels.

FreedomPay, a merchant processor with 20,000 customers in the US, has connected to Engage People. The integration was handled almost entirely by Engage People. Ease of integration is necessary to make Engage People's merchant network as ubiquitous as possible, as quickly as possible.

IN THIS ARTICLE

engage

The company has raised $3.0 million in equity and debt financing since 2020. It earns revenue from merchants and loyalty program providers and is already cash-flow positive after handling 3.5 million transactions this year.

Retailers stand to benefit from an available pool of several hundred billion reward points worldwide that need more convenient redemption opportunities. Inflation, as well as the threat of a recession, are expected to boost the value of PWP.

American Express lets cardholders pay with Membership Rewards points for purchases at Amazon, Best Buy, Boxed, GrubHub, PayPal, Rite Aid, Saks, Staples and elsewhere. Other programs entering the PWP channel include FIS in partnership with Walmart, and CoinBridge technology from Nayax.

INTERVIEWED FOR THIS ARTICLE

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Prior issues: 1103, 1062

Top Card Issuers in Latin America

The combined purchase volume (spending for goods and services) of the 50 largest general purpose payment card issuers in the Latin America and Caribbean (LA&C) region was $786.36 billion in 2021, an increase of 28.8% versus last year.

The top 50 issued 771.9 million credit, debit and prepaid consumer and commercial cards with global brands—Visa, Mastercard, Maestro, Discover, Diners Club, American Express and JCB. This group also issued 203.7 million domestic-only cards.

Visa and Mastercard cards issued by the 50 largest equaled 72.1% of all Visa and Mastercard cards issued in LA&C.

The top 50 had combined credit card purchase volume of $437.04 billion in 2021, an increase of 31.0% when compared to 2020. This was generated by 344.8 million cards. Spending per credit card averaged $1,268.

The 50 largest issuers generated debit card purchase volume of $363.08 billion. This was tied to 634.2 million cards. Spending per debit card averaged $572.

The top 50 ranking included issuers from 10 countries. Brazil led with 12 issuers. Chile was second with 9 issuers. Mexico placed 7 issuers and Argentina and Colombia each placed 6 issuers.

Venezuelan banks are not included in this ranking of the LA&C region's largest issuers because it is not possible to compare purchase volume with issuers from other countries owing to inflation and government manipulation of exchange rates to the US dollar.

Prior issues: 1208, 1186, 1162, 1140, 1118, 1098, 1073, 1052, 1026

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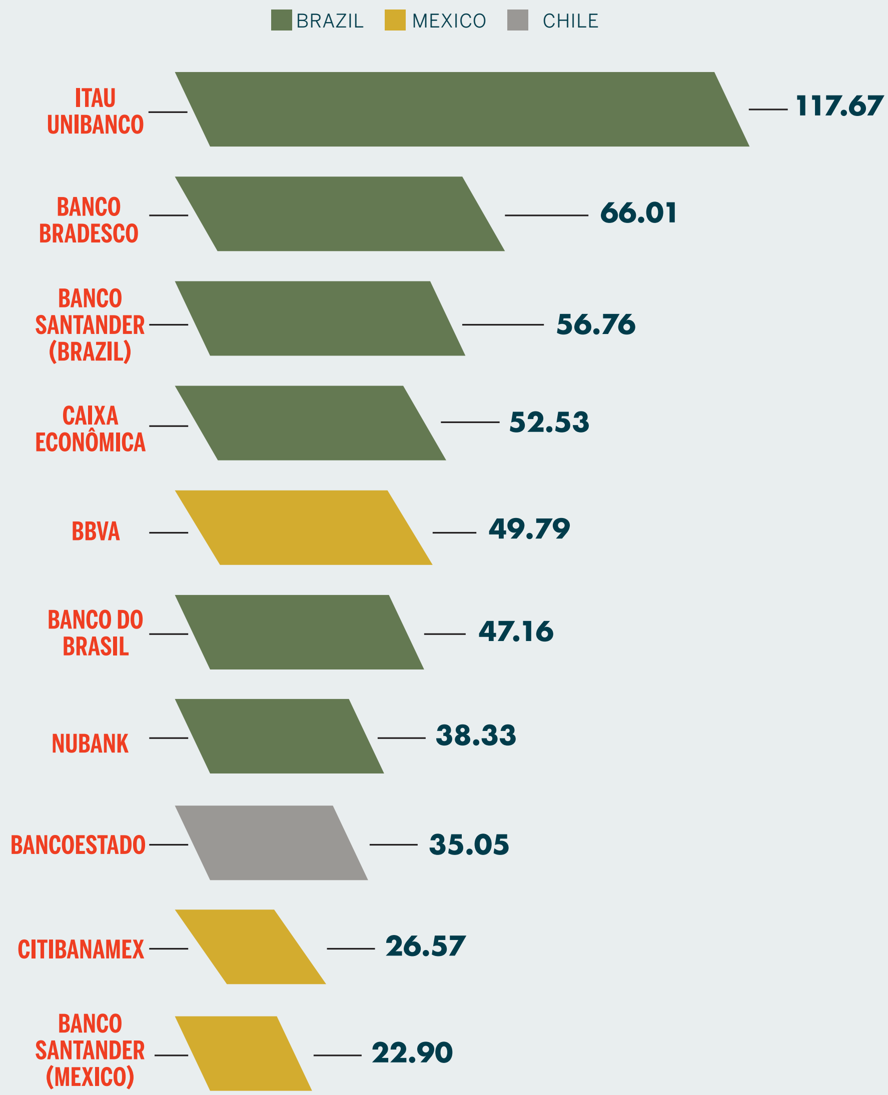
Top Issuers in Latin America Ranked by Purchase Volume
$Billions in 2021



Top General Purpose Card Issuers in Latin America

Mastercard, Visa, Maestro, Amex, Diners Club, Discover, JCB and Domestic-Only Cards

	General Purpose Card Results						Visa and Mastercard Results					
ISSUER, COUNTRY	2021 RANK	PURCHASE VOLUME (MIL.)	2021 RANK	TOTAL VOLUME (MIL.)	2021 RANK	CARDS (000)	2021 RANK	PURCHASE VOLUME (MIL.)	2021 RANK	TOTAL VOLUME (MIL.)	2021 RANK	CARDS (000)
Itau Unibanco, Brazil	1	$117,673.3	3	$117,673.3	5	74,189	1	$110,637.3	3	$110,637.3	2	70,630
Banco Bradesco, Brazil	2	$66,005.4	1	$143,438.6	1	215,360	2	$49,839.7	2	$111,504.5	1	150,007
Banco Santander, Brazil	3	$56,758.3	5	$73,141.4	4	90,685	4	$44,178.8	6	$49,769.3	4	45,968
Caixa Econômica Federal, Brazil	4	$52,531.5	9	$52,533.4	3	104,560	10	$19,695.1	13	$19,697.0	5	43,908
BBVA, Mexico	5	$49,793.8	2	$137,282.6	7	39,273	3	$49,793.8	1	$137,282.6	7	39,273
Banco do Brasil, Brazil	6	$47,155.1	6	$69,703.7	2	110,692	6	$38,244.7	9	$41,582.9	3	69,833
Nubank, Brazil	7	$38,325.0	11	$43,800.0	6	41,100	5	$38,325.0	8	$43,800.0	6	41,100
BancoEstado, Chile	8	$35,051.9	7	$62,275.2	13	15,146	9	$22,094.4	10	$39,302.8	16	10,097
Citibanamex, Mexico	9	$26,572.3	4	$93,969.6	8	20,302	7	$26,034.9	4	$93,309.3	10	17,708
Banco Santander, Mexico	10	$22,898.4	10	$49,502.1	10	18,452	8	$22,836.3	7	$49,440.0	9	18,400
Banco Popular, Puerto Rico	11	$22,310.2	13	$28,356.9	27	5,183	12	$14,059.6	19	$15,933.4	51	2,111
Banco Santander, Chile	12	$19,749.5	15	$22,585.1	41	3,246	13	$13,694.0	20	$15,127.3	45	2,295
Banorte, Mexico	13	$18,501.5	8	$61,859.9	15	13,516	11	$18,501.5	5	$61,859.9	12	13,516
BAC Credomatic Network, Group[1]	14	$16,087.3	16	$22,451.3	25	6,187	15	$12,133.0	14	$17,901.6	28	4,802
Bancolombia, Colombia	15	$14,676.8	12	$38,379.8	14	14,933	22	$8,410.5	15	$17,538.3	23	6,865
Banco de Chile, Chile	16	$13,614.3	20	$16,661.5	32	4,238	16	$11,963.6	21	$13,222.3	48	2,212
Banco Falabella, Chile	17	$13,414.1	22	$15,972.2	29	5,057	14	$13,414.1	18	$15,972.2	26	5,057
Banco Santander Río, Argentina	18	$12,624.1	18	$18,641.1	11	18,087	18	$11,293.7	16	$17,309.1	11	14,225
Banco Sicoob, Brazil	19	$12,229.2	23	$14,115.7	20	9,440	17	$11,507.6	22	$13,123.1	19	8,631
Banco de Crédito BCP, Peru	20	$9,528.6	14	$26,071.2	16	12,380	19	$9,315.9	11	$25,787.0	13	12,280
Banco de Crédito e Inversiones, Chile	21	$9,221.8	24	$11,626.6	52	2,293	20	$9,221.8	23	$11,626.6	46	2,293
Banco CSF, Brazil	22	$8,927.3	28	$8,927.3	17	11,030	21	$8,927.3	27	$8,927.3	14	11,030
Porto Seguro, Brazil	23	$7,194.1	32	$7,194.1	43	2,856	23	$7,194.1	32	$7,194.1	37	2,856
Banco Inter, Brazil	24	$6,568.8	31	$7,935.3	9	19,064	24	$6,568.8	30	$7,935.3	8	19,064
HSBC, Mexico	25	$6,463.9	17	$20,239.7	23	7,555	25	$6,463.9	12	$20,239.7	21	7,555
Banco Davivienda, Colombia	26	$5,881.1	21	$16,438.3	21	9,268	28	$3,992.0	31	$7,447.0	41	2,656
FirstBank, Puerto Rico	27	$5,225.8	38	$5,585.0	74	947	30	$3,631.0	46	$3,780.8	74	692
Alelo, Brazil	28	$4,612.9	46	$4,612.9	26	5,511	26	$4,612.9	41	$4,612.9	24	5,511
Scotiabank, Chile	29	$4,578.6	37	$5,664.9	71	1,082	27	$4,578.6	37	$5,664.9	69	1,082
Diners Club, Ecuador	30	$4,401.8	44	$4,664.1	72	1,061	64	$1,101.8	69	$1,164.1	90	361
Banco Nacional, Costa Rica	31	$3,827.3	41	$4,809.8	51	2,346	29	$3,827.3	39	$4,809.8	43	2,346
Itaú CorpBanca, Chile	32	$3,268.7	50	$3,864.8	75	814	38	$2,827.1	48	$3,369.3	73	694
Inbursa, Mexico	33	$3,242.8	45	$4,633.9	38	3,360	33	$3,102.9	42	$4,494.0	36	2,930
BBVA Continental, Peru	34	$3,232.6	25	$11,039.7	28	5,139	31	$3,232.6	24	$11,039.7	25	5,139
Scotiabank Colpatria, Colombia	35	$3,178.5	40	$5,091.3	47	2,590	42	$2,588.4	52	$2,821.4	59	1,434
BBVA, Argentina	36	$3,112.7	43	$4,750.0	22	7,876	32	$3,112.7	40	$4,750.0	20	7,876
Banco Popular, Dominican Republic	37	$2,997.5	33	$6,747.5	65	1,398	34	$2,997.5	33	$6,747.5	61	1,398
ICBC, Argentina	38	$2,995.0	48	$4,221.2	44	2,850	35	$2,995.0	44	$4,221.2	38	2,850
Banco Ripley, Chile	39	$2,907.6	52	$3,499.2	61	1,651	47	$2,198.4	54	$2,573.8	62	1,301
BBVA, Colombia	40	$2,844.6	27	$9,847.4	30	4,907	36	$2,835.1	26	$9,837.9	27	4,900
Banco del Pacífico, Ecuador	41	$2,828.5	35	$6,387.8	46	2,668	37	$2,828.5	35	$6,387.8	40	2,668
Banco Galicia, Argentina	42	$2,806.7	42	$4,805.9	19	10,095	45	$2,456.5	43	$4,448.6	17	9,299
Scotiabank, Mexico	43	$2,776.9	26	$10,653.7	36	3,616	39	$2,776.9	25	$10,653.7	32	3,616
Interbank, Peru	44	$2,739.1	19	$16,876.2	31	4,482	46	$2,365.0	17	$16,401.2	29	4,268
Banco Provincia, Argentina	45	$2,611.1	34	$6,604.0	18	10,298	40	$2,611.1	34	$6,604.0	15	10,298
Banco Caja Social, Colombia	46	$2,608.9	39	$5,381.5	49	2,443	41	$2,608.9	38	$5,381.5	42	2,443
Banco de Bogotá, Colombia	47	$2,542.2	30	$8,457.0	33	3,960	43	$2,542.2	29	$8,457.0	30	3,960
CAT Administradora de Tarjetas, Chile	48	$2,527.5	58	$2,634.4	56	2,074	44	$2,527.5	53	$2,634.4	52	2,074
Banco de la Nación, Argentina	49	$2,374.1	54	$3,203.2	12	16,705	57	$1,529.8	59	$1,854.5	18	8,704
Banco Banrisul, Brazil	50	$2,360.2	47	$4,571.4	35	3,620	60	$1,389.9	64	$1,389.9	64	1,224

General purpose: Visa, Mastercard, Maestro, American Express, Diners Club, Discover, JCB and domestic-only consumer and commercial credit, debit and prepaid cards. Visa and Mastercard results do not include Maestro cards or purchase volume, or cards with only the Plus or Cirrus brands. **1** Includes Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

Ravelin and Mastercard Partner to Fight Quick-Commerce Fraud →

Top Credit Card and Debit Card Issuers in LA&C

Top 50 Credit Card Issuers

Rank 2021	Issuer, Country	Purchase Volume (Mil.)	Cards (000)	Purchase Volume per Card
1	**Itau Unibanco**, Brazil	$87,950.5	41,871	$2,101
2	**Banco Bradesco**, Brazil	$41,548.6	97,748	$425
3	**Nubank**, Brazil	$38,325.0	41,100	$932
4	**Banco Santander**, Brazil	$37,663.0	16,045	$2,347
5	**Banco do Brasil**, Brazil	$35,307.0	24,490	$1,442
6	**BBVA**, Mexico	$19,614.5	6,273	$3,127
7	**Citibanamex**, Mexico	$15,970.0	5,855	$2,727
8	**BAC Credomatic Network**, Group[1]	$11,799.9	3,019	$3,908
9	**Banco Santander**, Chile	$9,594.9	1,045	$9,180
10	**Caixa Econômica Federal**, Brazil	$9,198.7	7,624	$1,207
11	**Banco CSF**, Brazil	$8,927.3	11,030	$809
12	**Banco Santander**, Mexico	$8,238.9	3,926	$2,098
13	**Banco Falabella**, Chile	$8,126.5	3,692	$2,201
14	**Banco Santander Río**, Argentina	$7,332.8	10,633	$690
15	**Porto Seguro**, Brazil	$7,194.1	2,856	$2,519
16	**Banco Sicoob**, Brazil	$6,754.1	5,097	$1,325
17	**Banco de Chile**, Chile	$6,375.5	1,472	$4,332
18	**Banorte**, Mexico	$6,026.2	2,155	$2,796
19	**Bancolombia**, Colombia	$4,837.7	2,471	$1,958
20	**Diners Club**, Ecuador	$4,401.8	1,061	$4,150
21	**Banco Popular**, Puerto Rico	$3,515.6	642	$5,473
22	**HSBC**, Mexico	$3,437.0	1,361	$2,526
23	**Banco de Crédito BCP**, Peru	$3,301.1	951	$3,470
24	**Banco de Crédito e Inversiones**, Chile	$3,253.9	967	$3,364
25	**Banco Davivienda**, Colombia	$3,197.7	1,438	$2,224
26	**Banco Inter**, Brazil	$3,138.2	14,619	$215
27	**Scotiabank Colpatria**, Colombia	$2,616.8	1,458	$1,795
28	**CAT Administradora de Tarjetas**, Chile	$2,527.5	2,074	$1,218
29	**BBVA**, Argentina	$2,516.6	4,681	$538
30	**Banco del Pacífico**, Ecuador	$2,344.2	1,161	$2,018
31	**Banco Ripley**, Chile	$2,198.4	1,301	$1,690
32	**Inbursa**, Mexico	$2,097.1	1,609	$1,303
33	**Banco General**, Panama	$2,050.8	177	$11,576
34	**ICBC**, Argentina	$1,975.5	1,673	$1,181
35	**Itaú CorpBanca**, Chile	$1,906.7	279	$6,826
36	**Banco Galicia**, Argentina	$1,890.0	5,134	$368
37	**Banco Popular**, Dominican Republic	$1,882.5	302	$6,233
38	**Banco Provincia**, Argentina	$1,758.0	3,859	$456
39	**Banco Falabella**, Colombia	$1,720.0	1,899	$906
40	**Scotiabank**, Chile	$1,683.4	531	$3,172
41	**Banco Banrisul**, Brazil	$1,666.0	1,282	$1,299
42	**Interbank**, Peru	$1,498.3	893	$1,678
43	**BBVA Continental**, Peru	$1,431.7	507	$2,824
44	**Banco Invex**, Mexico	$1,336.2	452	$2,958
45	**Banco de Bogotá**, Colombia	$1,286.7	1,170	$1,099
46	**Banco Pichincha**, Ecuador	$1,179.7	719	$1,641
47	**Bank of Nova Scotia**, Jamaica	$1,149.4	149	$7,697
48	**Republic Bank**, Trinidad & Tobago[2]	$1,109.8	132	$8,416
49	**Cetelem**, Brazil	$1,091.8	3,373	$324
50	**Scotiabank**, Peru	$1,088.3	526	$2,070

Visa, Mastercard, American Express, Diners Club, JCB, Discover and general purpose domestic consumer and commercial credit cards. **1** Includes Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. **2** Includes Barbados and Grenada.

Top 50 Debit Card Issuers

Rank 2021	Issuer, Country	Purchase Volume (Mil.)	Cards (000)	Purchase Volume per Card
1	**Caixa Econômica Federal**, Brazil	$43,332.8	96,936	$447
2	**BancoEstado**, Chile	$34,098.6	14,425	$2,364
3	**BBVA**, Mexico	$30,179.3	33,001	$915
4	**Itau Unibanco**, Brazil	$29,722.8	32,318	$920
5	**Banco Bradesco**, Brazil	$24,456.7	117,612	$208
6	**Banco Santander**, Brazil	$19,095.3	74,640	$256
7	**Banco Popular**, Puerto Rico	$18,794.6	4,541	$4,139
8	**Banco Santander**, Mexico	$14,659.5	14,525	$1,009
9	**Banorte**, Mexico	$12,475.3	11,360	$1,098
10	**Banco do Brasil**, Brazil	$11,848.1	86,202	$137
11	**Citibanamex**, Mexico	$10,602.4	14,447	$734
12	**Banco Santander**, Chile	$10,154.6	2,201	$4,614
13	**Bancolombia**, Colombia	$9,839.1	12,462	$790
14	**Banco de Chile**, Chile	$7,238.8	2,767	$2,616
15	**Banco de Crédito BCP**, Peru	$6,227.5	11,428	$545
16	**Banco de Crédito e Inversiones**, Chile	$5,967.8	1,326	$4,501
17	**Banco Sicoob**, Brazil	$5,475.1	4,343	$1,261
18	**Banco Santander Río**, Argentina	$5,291.3	7,454	$710
19	**Banco Falabella**, Chile	$5,287.6	1,365	$3,875
20	**Alelo**, Brazil	$4,612.9	5,511	$837
21	**FirstBank**, Puerto Rico	$4,591.8	644	$7,128
22	**BAC Credomatic Network**, Group[1]	$4,287.4	3,167	$1,354
23	**Banco Inter**, Brazil	$3,430.6	4,445	$772
24	**HSBC**, Mexico	$3,026.8	6,194	$489
25	**Banco Nacional**, Costa Rica	$2,997.6	2,186	$1,371
26	**Scotiabank**, Chile	$2,895.2	551	$5,257
27	**Scotiabank**, Mexico	$2,776.9	3,616	$768
28	**Banco Davivienda**, Colombia	$2,683.4	7,830	$343
29	**Banco Caja Social**, Colombia	$2,452.7	2,177	$1,127
30	**Oriental Bank**, Puerto Rico	$1,987.4	246	$8,085
31	**BBVA**, Colombia	$1,907.9	4,188	$456
32	**BBVA Continental**, Peru	$1,801.0	4,632	$389
33	**Banco de Costa Rica**, Costa Rica	$1,610.1	1,803	$893
34	**Banco de la Nación**, Argentina	$1,427.1	13,335	$107
35	**Itaú CorpBanca**, Chile	$1,362.0	535	$2,546
36	**Banco de Bogotá**, Colombia	$1,255.6	2,790	$450
37	**Interbank**, Peru	$1,240.8	3,590	$346
38	**Maduro & Curiel's**, Curacao[2]	$1,160.1	325	$3,573
39	**Inbursa**, Mexico	$1,145.7	1,751	$654
40	**Banco Popular**, Dominican Republic	$1,114.9	1,096	$1,017
41	**Banco Lafise Bancentro**, Nicaragua	$1,077.4	260	$4,143
42	**ICBC**, Argentina	$1,019.6	1,177	$866
43	**RBC Royal Bank**, Trinidad & Tobago	$959.5	493	$1,947
44	**Banco Galicia**, Argentina	$916.7	4,961	$185
45	**Banco Provincia**, Argentina	$853.1	6,439	$132
46	**Banco Santander**, Uruguay	$852.6	416	$2,050
47	**Scotiabank**, Peru	$828.5	1,735	$478
48	**Banco Ripley**, Chile	$709.2	350	$2,028
49	**Banco Banrisul**, Brazil	$694.2	2,337	$297
50	**Banco Pichincha**, Ecuador	$656.2	2,107	$311

Visa, Mastercard and general purpose domestic consumer and commercial debit cards. **1** Includes Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. **2** Includes Aruba, Bonaire and St. Marteen.

Ravelin and Mastercard Partner to Fight Quick-Commerce Fraud

Merchants that sell online and provide immediate delivery of their goods or services, sometimes called on-demand or quick-commerce merchants, are experiencing rising losses to fraud. Those losses are particularly painful because profit margins in this sector, which includes the delivery of food and alcoholic beverages, fashion and travel, are often thin.

Criminals sell stolen payment card credentials and personally identifiable information on the dark web to other criminals to be used to create a synthetic identity specifically to commit fraud in the on-demand commerce sector. Consequently, the majority of on-demand fraud occurs on transactions with first-time customers. Because on-demand goods and services are provided quickly, protection must be deployed at account opening in addition to at checkout, all without negatively impacting the customer's experience.

Critical to fighting this type of fraud is verifying data provided by customers when they open new accounts online or in a mobile app. Delivering that risk score in milliseconds via an API, including on cross-border transactions, is the business of Ekata, a subsidiary of Mastercard.

Fraud prevention specialist Ravelin, which operates mainly in Europe, the US and Latin America, has added Ekata's data-enrichment service to its proprietary machine learning technology, advanced analytics and rules engine platform to fully authenticate customers of its quick-commerce merchants. ACI Worldwide, Adyen and Kount also use Ekata.

Ravelin has also connected to another Mastercard subsidiary, Ethoca. Once a card transaction has been processed, Ethoca risk management provides information on previously confirmed instances of fraud and then protects against chargebacks by presenting transaction information to consumers through their banking app, including merchant logos and itemized receipts.

IN THIS ARTICLE

Ravelin

Adding Ekata, which is presented to merchants as an identity risk score, and Ethoca, typically adds a few cents to the fraud fighting process. Large merchants might pay only fractions of a cent.

Ravelin also helps on-demand merchants fight fraud tied to the abuse of sales promotions, which can involve buyers trying to benefit multiple times from a one-time offer, as well as collusion fraud in which merchants obtain a card authorization for orders that were never placed.

Most of Ravelin's customers are large merchants that the company has signed through its direct sales force. It integrates with the payment gateways and acquirers used by its customers. Ravelin's expertise includes helping its customers comply with the European Union's Payment Services Directive (PSD2) regulation. Its fully certified 3D Secure 2 service for payment card authentication also helps optimize the successful completion of a sale.

Fiserv is the first acquirer to resell Ravelin's fraud fighting platform to merchants. Ravelin is looking for additional white-label deals.

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Digital Currency Update

The intersection of card and crypto payments

PRODUCTS

Plaid launched Wallet Onboard, a product that allows developers to offer connections among more than 300 self-custody crypto wallets using a single integration and a UI that is familiar to existing Plaid users. Wallet Onboard is built on Plaid Link, a platform that lets consumers connect their financial accounts across thousands of fintech apps and services.

Crypto.com has enabled automatic top-ups for users of its Visa cards in the US, Australia and Brazil. Cardholders can set the top-up amount and the minimum balance at which they want the top-up to occur from inside the Crypto.com app.

Speed, a payment platform that uses the Lightning network, has launched a plugin that allows online merchants with a store on the WooCommerce platform to accept cryptocurrencies.

Nuvei, a payment platform provider, has added instant settlement in EUROC and USDT stablecoins to its existing SEPA, RTP and Faster Payments settlement capability. The service will help Nuvei's merchants that do business in markets where instant settlement with fiat currency is not otherwise feasible.

Doshi, a crypto wallet provider, launched a product designed to teach teens and their guardians about blockchain technology. It also lets young adults store their digital assets and connect to Web3 applications including video games. The company says that crypto asset ownership for those under 18 is next to impossible and that it wants to capture the crypto market for young adults.

N26, a neobank that shut down its US operations early this year, launched N26 Crypto in Austria. The company says that crypto trading and investing capabilities will exist alongside educational content on crypto assets.

Bridge Network, a cross-chain protocol, plans to launch BridgePay, a virtual or physical debit card product that allows users to convert tokens from more than 20 supported blockchains into fiat currency for payment.

PARTNERSHIPS

Google Cloud and Coinbase have partnered for a range of Web3 ecosystem services. Coinbase will use Google Cloud's platform to process blockchain data. It will also build a global data platform there. Some Google Cloud customers, starting with those providing Web3 services, will be able to pay for services via select cryptocurrencies using Coinbase Commerce.

Crecy, an alternative lending app, partnered with Pomello to launch a credit card product. The company's Mexican users can take out credit lines of up to $35,000 when they use their cryptocurrencies as collateral.

Coinbase announced an integration with **Primer**, a payment orchestration and automation platform, that allows Primer's merchants to add crypto as a payment option to their checkout page by using clicks rather than code.

Inswitch and Binance have partnered to boost crypto payment adoption in Latin America. Merchants can use Binance Pay to receive payments in 50+ cryptocurrencies.

FUNDING

Reap, a digital payment company, raised $40 million in a Series A funding round led by Acorn Pacific Ventures. The company has a card platform that supports repayment using stablecoins.

Ottr, a company with a mobile app for holding crypto, has closed on a $3.1-million pre-seed funding round. Proceeds will be used for expansion to over 100 countries.

CBDC

JCB is partnering with **Idemia** and Soft Space, a payment platform provider, to pilot a CBDC and test acceptance technology in-store with merchants in Tokyo. The partners say that the aim of the pilot is to assure acceptance of CBDCs when using wallets and cards for payments at POS terminals. Development of the pilot will conclude this year. Testing will occur through March 2023.

Swift partnered with Capgemini, a technology consulting firm, to prove that CBDC transactions can be made on existing financial networks. The tests accomplished CBDC-to-CBDC transactions between different DLT networks as well as fiat-to-CBDC transactions between those networks and a real-time gross settlement system. Swift says that 14 central and commercial banks, including Banque de France, HSBC, NatWest, UBS and Wells Fargo are collaborating to explore full-scale deployment.

The **Bank for International Settlements** (BIS) has released a paper describing the development and pilot testing of "Project mBridge," a CBDC-focused collaboration between the Hong Kong Monetary Authority, the Bank of Thailand, the Digital Currency Institute of the People's Bank of China and the Central Bank of the United Arab Emirates. Those financial institutions developed a purpose-built blockchain called the mBridge Ledger to serve as a platform for implementation of multicurrency cross-border payments in central bank digital currencies. BIS said the pilot test involved 20 commercial banks. Over $12 million was issued on the platform, facilitating over 160 payment and FX PvP transactions for a total of more than $22 million settled on the platform.

The **Reserve Bank of India** announced a digital rupee pilot with participation from nine banks.

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