FOR 47 YEARS, THE LEADING PUBLICATION COVERING PAYMENT SYSTEMS WORLDWIDE

AUGUST 2018 / ISSUE 1137

Top Issuers in the Middle East and Africa

The 50 largest issuers of credit, debit, and prepaid consumer and commercial general purpose cards in the Middle East and Africa region are ranked on pages 10 and 11. This group, which

> see p. 12

Blockchain for Payments Using Cryptocurrency

The Logos Network from Promethean Labs has received \$3 million in seed funding to build a blockchain-based payment processing platform superior to those currently used to trade

> see p. 5

Installment Credit/Loyalty via Mobile App

MyGini offers a payment and card management app Visa and Mastercard issuers in the U.S. can use to provide installment credit for in-store and online purchases as well as support for loyalty and

> see p. 8

Software for AI, Machine Learning, and Analytics

The ever-growing amount of relevant data generated in card and mobile payment businesses increasingly needs to be acted upon in real time to maximize operational efficiency and grow profits.

> see p. 6

Walmart Credit Cards to Capital One

Capital One is the 5th largest issuer of general purpose-type credit cards and 5th largest issuer of private label credit cards in the U.S. It will expand both portfolios next year when it becomes the

> see p. 5

FICO's Free Cybersecurity Score

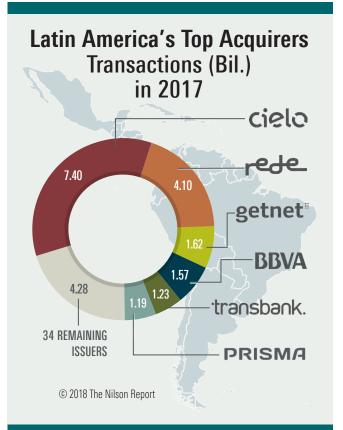
When predictive analytics and data science company FICO was buying its own cybersecurity insurance three years ago, it realized an opportunity existed to create a score that quantified risk and

> see p. 12

U.S. Commercial Cards — Part 3

Consumer and commercial credit, debit, and prepaid global general purpose cards from U.S. issuers generated \$5.550 trillion in purchase volume for goods and services in 2017. Purchase volume

> see p. 7



Latin America's Largest Acquirers

A ranking of the 41 largest merchant acquirers in Latin America and the Caribbean (LAC) based on card payments processed in 2017 appears on page 9. Collectively, these acquirers processed 18.86 billion Visa and Mastercard transactions from 5.9 million active merchant outlets in LAC. Purchase volume—spending for goods and services—generated by those transactions was \$641.25 billion. The six largest acquirers—Cielo, Rede, Getnet, BBVA Bancomer, Transbank, and Prisma Medios de Pago—combined to process 79% of all Visa and Mastercard transactions handled by the top 41.

Acquirers listed here also processed 2.52 billion transactions from American Express, Diners Club, and Discover global brand cards as well as domestic-only credit and debit cards issued in

> see p. 8

INSIDE 2-4 Fast Facts
4 Investments & Acquisitions — July 2018

CHARTS

- 7 Spending on U.S. Commercial & Consumer Cards
- 8 Top 10 General Purpose Acquirers in Latin America 2017
- 9 Largest Visa/Mastercard Merchant Acquirers in Latin America 2017
- **10-11** Middle East & Africa Top Credit, Debit, General Purpose/Visa/Mastercard Card Issuers 2017

FAST FACTS

AUGUST 2018 ISSUE 1137

No paid advertising. No sponsored content of any kind.

No company can pay to be featured in our newsletter.

It is never permissible for subscribers to forward or print this issue. Doing so violates copyright laws. CITI RETAIL SERVICES will provide a private label credit card program in the U.S. and Canada to Caterpillar Financial Services (CFS). The new Cat Card Program will offer commercial and consumer cards. CFS has been operating commercial financing programs in-house. Doug Krapcho is Head of Partnership Management, Citi Retail Services, (678) 556-1067, doug.krapcho@citi.com, www.citi.com. Ryan Davis is North America Commercial Card Manager at Caterpillar Financial Services, (615) 341-1000, ryan.davis@cat.com, www.catfinancial.com.

FIRST DATA has integrated with Ellie Mae's Encompass Consumer Connect lending platform. Ellie Mae serves 3,500 financial institutions and mortgage lending companies. It processes more than one-third of all mortgage applications in the U.S. Customers of Ellie Mae will be able to accept payment for all costs related to the lending process, including loan origination, processing, underwriting, and credit reports. Rob Nathan is EVP at the CardConnect unit of First Data, (484) 581-2970, rnathan@cardconnect.com, www.cardconnect.com.

ETA has formed a Canadian Issues Working Group. Committee members include Moneris, First Data, Worldpay, Pivotal Payments, Paysafe, Square, Intuit, Western Union, and Blake, Cassels & Graydon. Jason Oxman is CEO at ETA, (202) 828-2635, joxman@electran.org, www.electran.org.

CITIZENS BANK, the 23rd largest U.S. credit card issuer, has launched the Citizens Bank Cash Back Plus World Mastercard, which offers 1.8% cash back with no annual fee. There is no limit on the amount of cash back cardholders can earn. Nate Bacon is Head of Consumer Credit Card, (302) 421-2253, nathaniel.bacon@citizensbank.com, www.citizensbank.com.

ALIANT PAYMENT SYSTEMS, provider of merchant services and payment processing to U.S. merchants, has created a domestic payment service that converts cryptocurrency to U.S. dollars. The service features a web interface, an API for ecommerce integration, mobile applications for iOS and Android, a virtual terminal with an email invoicing feature, a risk monitoring tool, and reporting. *Eric Brown is CEO*, (954) 492-2530, eric.brown@ aliantpayments.com, www.aliantpayments.com.

UNITED TRANZACTIONS' check guarantee services have been integrated with the Tempus Technologies' Payment-Mate check processing interface to support both scanned and manually entered checks. *Mark Tapia is Director of Business Development at United TranzActions,* (786) 264-7028, mtapia@unitedtranzactions.com, www.unitedtranzactions.com.

KROGER, which owns 2,779 grocery stores in the U.S. under names including Kroger, Ralphs, Fred Meyer, Dillons, and Fry's, has discontinued acceptance of Visa credit cards at 21 stores and 5 gas stations in Northern California. Visa debit cards are still accepted.

CONTROLSCAN, provider of managed security and compliance services, will offer a complementary PCI DSS consultation to payment facilitator clients of Double Diamond Group and Rich Consulting. Clients will talk with a PCI Qualified Security Assessor to understand their company's particular scope of compliance, ways they can more quickly and easily achieve compliance, and more. Chris Bucolo is VP of Market Strategy at ControlScan, (678) 279-2657, cbucolo@controlscan.com, www.controlscan.com. Deana Rich is CEO at Rich Consulting, (818) 613-7627, deanarich@deanarich.com, www.deanarich.com.

Conferences & Seminars

Global Payment Summit 2018: September 19-20, 2018. The Four

Seasons Hotel, Kuala Lumpur,
Malaysia. Estimated attendance:
250. Cost for the two-day conference is \$1,695. Subscribers to
The Nilson Report will receive
a 20% discount. (Use code
GPSPartner2018.) Contact
Joyce Ang at Currency Research,
(65) 9241-1876, jang@
currency-research.com. Register at
www.globalpaymentsummit.com.

PayExpo Europe 2018: October 9-10, 2018. The Business Design Centre, London, U.K. Estimated attendance: 2,000. Cost for the two-day conference is \$1,295 until September 7; \$1,684 after that (£999 + VAT until September 7; £1,299 + VAT after that). Subscribers to The Nilson Report will receive a 20% discount. (Use code TNR20.) Contact Andrew Earle at Clarion Events, 44 (207) 384-7893, andrew.earle@clarionevents.com. Register at www.payexpo.com.

ATM & Payments Innovation Summit 2018: October 17-19, 2018. The Eurostar Madrid Tower Hotel, Madrid, Spain. Estimated attendance: 500+. Cost for the three-day conference for ATMIA members is \$1,800 (nonmember \$2,600; bank rate \$650). Contact Mary Lawrence at ATMIA, 44 (239) 311-7194, mary.lawrence@atmia.com. Register at www.atmia.com/conferences/europe/.

Cashless Payments Summit
2018: October 18-19, 2018. The
Emperors Palace Convention
Centre, Johannesburg, South
Africa. Estimated attendance: 100.
Cost for the two-day conference is
\$700. Subscribers to The Nilson
Report will receive a 20% discount. (Use code Nilson Report.)
Contact Jerry Davison at
Vukani Communications,
27 (11) 886-0433, jerry@
vukanicomms.co.za. Register at
www.vukanicomms.co.za/event/

cashless-payments-summit-2018/.

DLOCAL, which specializes in facilitating cross-border payments for global ecommerce merchants in Latin America and emerging markets, has expanded to Egypt and Morocco. The company's platform is designed to support SaaS companies, ecommerce retailers, marketplaces, and online travel agencies. *Liron Diamant is VP of Business Development, 972 (52) 222-4074, liron@dlocal.com, www.dlocal.com.*

ADYEN'S end-to-end payment processing platform will be offered to customers of Scalefast, provider of global ecommerce platforms. Adyen's customers in the U.S. include Facebook, Netflix, eBay, and Uber. *Roelant Prins is CCO at Adyen, 31 (85) 888-8138, roelant.prins@adyen.com, www.adyen.com.*

LOYLOGIC provides its Akruu platform to Mawarid Finance in the U.A.E. Akruu provides opportunities beyond credit card spending for consumers to collect rewards points. Other means include affiliate online shopping, Groupon deals, merchandise offers, and more. *Poul Koza is SVP, Global Sales,* 45 (20) 443-001, poul.koza@loylogic.com, www.loylogic.com.

GHL CARDPAY, a wholly owned subsidiary of GHL Systems, has been appointed as a direct merchant acquirer for UnionPay International in Malaysia. *Danny Leong is Group CEO at GHL Systems*, 60 (3) 6286-3388, dannyleong@ghl.com, www.ghl.com. Wenhui Yang is General Manager, Southeast Asia at UnionPay International, (65) 6535-3380, yangwenhui@unionpay.com, www.unionpay.com.

BANCOMAT, which is owned by 132 banks in Italy, will integrate with the Jiffy mobile payment service. The new Bancomat Pay service will be live by year-end for 5 million PagoBancomat cardholders. *Alessandro Zollo is CEO at Bancomat, 39 (06) 676-7447, a.zollo@bancomat.it, www.bancomat.it.*Nicola Cordone is Deputy CEO at SIA, 39 (02) 6084 4900, nicola.cordone@sia.eu, www.sia.eu.

ANDERSON ZAKS, a U.K.-based payment service provider to 15,000 merchants, will offer its RedCard payment gateway with Bluefin's PCI-validated point-to-point encryption security service. Adina Ahmed is CTO at Anderson Zaks, 44 (134) 431-7910, adina.ahmed@andersonzaks.com, www.andersonzaks.com. Greg Cornwell is Head of Global Sales at Bluefin, (770) 709-7745, gcornwell@bluefin.com, www.bluefin.com.

WORLDNET, an Ireland-based omnichannel payment service provider, is offering merchants one second chip transaction authorizations in its GoChip range of POS devices from IDTech. *Will Byrne is CEO at Worldnet*, 353 (1) 524-1099, w.byrne@worldnettps.com, www.worldnettps.com.

DISCOVER GLOBAL NETWORK will open its more than 42 million merchant acceptance locations and 2 million ATMs in 190 countries and territories to 26 card-issuing member institutions of National Credit Card Center (NCCC) of Taiwan. NCCC is a nonprofit foundation that provides processing services, international credit card brand licensing and sponsorship, a shared information system, as well as a merchant network. It also works with Taiwanese merchants to ensure acceptance of Discover, Diners Club, and Discover Global Network affiliate cards. Benjamin Chen is EVP at NCCC, 886 (2) 2719-1919, benjamin.chen@nccc.com.tw, www.nccc.com.tw. Joe Hurley is SVP and Head of Global Business Development at Discover, (224) 405-3057, joehurley@discover.com, www.discovernetwork.com.

MADA PAY mobile payment wallet now available in Saudi Arabia is the first tokenized, multi-issuer service in the country with contactless functionality. The wallet leverages the Mastercard Digital Enablement Service, as well as the mada tokenization platform. Ziad Al-Yousef is Managing Director at Saudi Payments, 966 (11) 466-2349, zyousef@saudipayments.com, www.sama.gov.sa. J.K. Khalil is Cluster Head, Saudi Arabia and Bahrain at Mastercard, j.k.khalil@mastercard.com, www.mastercard.com.

WORLDLINE, which provides payment processing for music service Spotify in more than 50 countries, and Ebanx, provider to ecommerce sellers of over 100 local payment options in Latin America, have developed a debit card acceptance service in Brazil for Spotify. Andre Allain is Director of Payment Partnerships and EMEA at Ebanx, 55 (41) 3044-8453, aa@ebanx.com, www.ebanx.com. Thais Fischberg is Head of Acceptance of Online Payments for Latin America at Worldline, 55 (11) 3568-2093, thais.fischberg@worldline.com, www.worldline.com.

NEDBANK Scan-to-Pay is a feature in the Nedbank banking app. It lets users handle all major QR code-based payment services in South Africa, including Masterpass, Pay@, SnapScan, and Zapper. Combined, these payment services reach 100,000 retail outlets and 800 billers. Entersekt provided the new feature through its Connekt mobile payments enablement product. Chris Wood is Card Issuing and Payments Executive at Nedbank, 27 (11) 295-4136, chriswo@nedbank.co.za, www.nedbank.co.za. Schalk Nolte is CEO at Entersekt, 27 (21) 815-2800, schalk@entersekt.com, www.entersekt.com.

AIR MILES collectors in Canada receive 50 miles for linking their Air Miles collector number to their Samsung account and 5 miles when they use their Air Miles card in Samsung Pay at Air Miles partners (limit of 5 times and 25 miles per week). *Blair Cameron is President at the Air Miles Reward Program,* (587) 441-0460, blair.cameron@loyalty.com, www.airmiles.ca.

Featured Conference

2018 ETA STRATEGIC LEADERSHIP FORUM

Three-Day Conference October 2-4, 2018 Laguna Cliffs Resort & Spa Dana Point, California

Topics include: security, IoT and connected cars, private equity, software and integrated solutions, contactless advancements, APIs to serve marketplaces, mergers and acquisitions, fintech. Speakers represent: WePay, JPMorgan Chase, Worldpay, Visa, Fiserv, Kount, Paya, Homebase, Samsung Pay, Mastercard, Wells Fargo, ParkMobile, Shift4 Payments, and more. Cost is \$995 through September 7 (nonmember \$1,395); \$1,145 through September 28 (nonmember \$1,545). Contact Kelsey Blackburn at ETA, (202) 677-7410, kblackburn@electran.org.

Register at www.etaslf.com.

CORNERCARD UK, a U.K.-based provider of business-to-business prepaid cards, can integrate with the Samsung Pay mobile wallet *Chris Adams is CEO at Cornercard UK, 44 (203) 626-0083, chris.adams@cornercard.co.uk, www.cornercard.co.uk.*

VERIFONE M400 multilane payment terminals as well as the Verifone Connect estate management feature will be deployed at 3,600 post office locations of Australia Post. *Yiannos Papadopoulos is President, APAC at Verifone, (65) 6390-1563, yiannosp1@verifone.com, www.verifone.com.*

Investments & Acquisitions — July 2018

Below is a list of 46 acquisitions, mergers, seed funding, venture funding, debt facilities, and corporate investment transactions that occurred in 16 countries in July 2018. The

United States led with 19 deals, followed by Europe with 13, Asia-Pacific with 10, 2 in Canada, and 2 in the Middle East.

Prior issues: 1135, 1133, 1131, 1129, 1127, 1125, 1123

Investments & Acquisitions July 2018

Company	Buyer/Investor	Amount (mil.)	Country
	ATM SERVICE PROVIDERS		
Casino ATMs	NRT Technologies Inc. 1	*	U.S.
	B2B PAYMENTS		
BlueVine	Series E ²	\$12.0	U.S.
Lemon Way	venture series unknown ³	\$12.2	France
	CARD MANUFACTURER		
PLI Card	Platinum Equity ⁴	*	U.S.
	CONSUMER FINANCE		
Applied Data Finance	equity/debt ⁵	\$145.0	U.S.
Arthashastra	ICICI Bank ⁶	\$1.2	India
C88 Financial	Series C ⁷	\$28.0	Singapore
FinAccel (Kredivo)	Series B ⁸	\$30.0	Indonesia
Paidy	Series C ⁹	\$55.0	Japan
	CREDIT BUREAU		
DataX	Equifax ⁴	*	U.S.
ICP	management buyout	\$3.9	U.K.
	CREDIT CARDS		
L.L.Bean	Citi 10	\$1,500.0	U.S.
Leumi Card	Warburg Pincus ⁴	\$683.3	Israel
	CRYPTOCURRENCY		
Elevated Consciousness	EY ⁴	*	U.S.
LightCash	corporate round 11	*	Singapore
Points	seed funding 12	\$8.0	Singapore
	LOYALTY		
Izicap	venture series unknown 13	\$7.0	France
	MERCHANT ACQUIRING		
Alpine Payment Systems	TouchSuite ⁴	*	Canada
Fattmerchant	Series C ¹⁴	\$10.5	U.S.
LevelUp	Grubhub ⁴	\$390.0	U.S.
PPRO Financial	venture series unknown 15	\$50.0	U.K.
undisclosed seller	Moneris Solutions ⁴	*	Canada
Universal Pay. Systems	Net Element ⁴	*	U.S.
Zooz	PayU ⁴	*	Israel
Zopper	PhonePe ⁴	*	India

Company	Buyer/Investor	Amount (mil.)	Country
	MOBILE PAYMENTS		
Click&Pay	Zaggle ⁴	*	India
Electronic Money Clip	angel funding 16	*	China
	MONEY TRANSFERS		
Airwallex	Series B ¹⁷	\$80.0	Australia
PaySend	venture series unknown 18	\$20.0	U.K.
Satispay	Series B ¹⁹	\$11.6	Italy
Saxo Payments	EQT ⁴	\$300.0	Denmark
TransferMate	ING Group 20	\$24.4	Ireland
	PERSONAL FINANCE		
Blast	seed funding ²¹	\$12.0	U.S.
Even.com	Series B ²²	\$40.0	U.S.
Moneybox	Series B ²³	\$18.1	U.K.
Tally	Series B ²⁴	\$25.0	U.S.
	PROCESSING		
Cheque&Credit Clearing Co.	NPSO Ltd.4	*	U.K.
Flywire	Series D ²⁵	\$100.0	U.S.
	SECURITY		
A-Lign	private equity round 26	\$54.5	U.S.
ai Corporation	growth equity ²⁷	\$2.5	U.K.
	SOFTWARE		
B2 Group	Gresham Technologies 4	*	Luxembourg
Compassmax	Clearent ⁴	*	U.S.
Paywire	Payscout ⁴	*	U.S.
Scandit	Series B ²⁸	\$30.0	Switzerland
Standard Cognition	seed funding 29	\$5.5	U.S.
Toast POS	Series D ³⁰	\$115.0	U.S.

*Terms not disclosed. ¹Acquisition of casino industry ATMs from U.S. Bank. ²From M12. ³Including Breega Capital. ⁴Acquisition. ⁵Including MAI Capital Management. ⁶Purchased 9.9% of equity. ¹Including Experian. ⁶Led by Square Peg Capital. ⁶Led by Itochu. ஶ̂Purchased co-branded card business from Barclays. ¹¹From TopFund. ¹²Including DHVC. ¹³Including Seventure Partners. ¹⁴Led by Fulcrum Equity. ¹⁵Led by PayPal. ¹⁶Investors not disclosed. ¹¹Including Tencent and Sequoia Capital. ¹⁶Led by MarCorp. Financial. ¹ʰIncluding Cooper Street Capital. ²ၿPurchased minority stake. ²¹Including CreditEase. ²²Led by Khosla Ventures. ²³Led by Eight Roads. ²⁴Led by Kleiner Perkins. ²⁵Led by Temasek Holdings. ²⁶From FTV Capital. ²¹/From existing investors. ²ðLed by GV. ²ීFrom Charles River Ventures. ³ðIncluding T. Rowe Price. ② 2018 The Nilson Report

Walmart Credit Cards to Capital One

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exclusive credit card partner of Walmart on August 1, 2019.

Walmart's existing credit card-issuing partner is Synchrony Financial. It owns \$10 billion in Walmart private label and



co-branded (Mastercard) general purpose card outstandings. Synchrony must decide whether to retain those assets or sell all or part of them to Capital One. Synchrony has the option of converting existing balances, including select private label outstandings, to new general purpose card products that offer consumers a value proposition not connected to Walmart. Conversion of Walmart accounts to new general purpose cards would occur in the first quarter of 2019. New Capital One/ Walmart cards would compete with them for new spending.

The Walmart
partnership
contributed more than
10% of the interest and
fee revenue Synchrony

earned from all card loans in 2017. Synchrony is the largest

issuer of private label cards in the U.S. based on outstandings and the 10th largest among general purpose card issuers. It has co-branded and private label card outstandings with the Gap, Lowe's, JCPenney, and Sam's Club.

Synchrony says that whether it sells the Walmart outstandings or converts them to other card products, its earnings will increase



another \$350 million in cost savings.

Offsetting the Walmart loss is the completion this month of an acquisition of \$7.60 billion in consumer credit outstandings from PayPal and unaffiliated third parties. PayPal received \$6.80 billion. Synchrony has a contract to provide consumer credit financing to PayPal customers through 2028 including co-branded Mastercard products.

Walmart will continue two prepaid card partnerships. American

Express Bluebird is available exclusively at Walmart and Bluebird.com. Green Dot issues the Walmart MoneyCard as Visa and Mastercard products as well as the private label Walmart card.

Synchrony owns \$10 bil. in Walmart credit card outstandings.

over what they would have been if they had signed a contract renewal with Walmart. If it sells the Walmart outstandings, that would free up around \$2.50 billion in capital and could result in up to

Blockchain for Payments Using Cryptocurrency

from page 1...

Bitcoin, Ethereum, and other cryptocurrencies plus also able to support using cryptocurrencies to buy and sell goods and services in the real world. Existing blockchains that handle cryptocurrency trading, while cheaper to operate than legacy card payment networks, are far slower. This makes them unacceptable for handling payments to merchants from consumers.

Bitcoin's blockchain-based trading platform handles only three transactions per second. It can take up to 60 minutes to confirm that a transaction has settled and at a cost per transaction between \$1 and \$2. The architecture of these blockchains can't support real-world commerce.

The Logos Network plans to create an open source payment platform capable of handling IoT (internet of things), in-store, and ecommerce retail payments. Other use cases include monetizing digital content in micropayments and large-value cross-border B2B

payments. It will do what existing blockchains that trade cryptocurrencies do—convert fiat

that trade cryptocurrencies do—convert fiat currency to cryptocurrency and present that cryptocurrency to a seller who can retain it in that form or convert it to the fiat currency. However, the Logos Network will do it quickly enough to work in realworld commerce. Average confirmation times

world commerce. Average confirmation times are three seconds.

The Director of Engineering at the Logos Network was part of the team behind the Mars rover project at NASA and Jet Propulsion Laboratory. The chain mesh (independent transaction chains) architecture of the Logos Network can handle 150,000 transactions per second.

> see p. 6

Blockchain for Payments Using Cryptocurrency

from page 5

To address the issue of volatility in a cryptocurrency's value versus that of a fiat currency, the Logos Network will provide rapid confirmation of the value exchange to minimize exposure. The company anticipates fees for its network service

Logos Network expects to be operational by the end of this year.

combined with fees for conversion of cryptocurrency to fiat currency will be 1% of the amount of a sale. Most of that 1% will be for the conversion, which will be provided by third parties.

The Logos Network expects to be operational by the end of this year. However, it says it will likely be three years before it sees transaction volume of significant scale.

The company is looking for strategic partners among payment service providers, acquirers, payment gateway providers, IoT device manufacturers, and online advertisers.

Two blockchain-based cryptocurrency-to-fiat currency payment platforms with real-world applications will soon hit the market. Both involve person-to-person (P2P) payments. POS processor Square will process Bitcoin transactions as part of its Square Cash app. Goldman Sachs has backed start-up Circle, which offers a P2P app for cryptocurrency transactions, including the ability to fix transactions at a value set in U.S. dollars.

Michael Zochowski is CEO in New York, (917) 993-2117, michael@prometheanlabs.io, www.logos.network.

Software for AI, Machine Learning, and Analytics

from page

However, issuers and acquirers, as well as technology providers to the industry, are playing catch-up in that effort, particularly after



they make acquisitions and take ownership of new data centers.

These days, large companies might operate a central data repository, multiple remote data centers, hybrid cloud and/or multicloud environments, edge deployments, and Kubernettes (open source platform for applications). Data resides in too many silos and is often managed discretely. Historically, companies with this problem have been advised to migrate everything to a central repository where comprehensive analysis can occur in real time, including using artificial intelligence (AI) to inform decisions. However, that consolidation is very costly.

American Express, Ingenico, TransUnion, and others have found an alternative solution software from MapR Technologies.

That company provides a platform to support realtime deployment of artificial intelligence at scale, including big data machine learning and data science analytics. MapR's platform links every environment and can ingest, store, manage, and initiate action on nearly any data type. The MapR platform can accommodate IoT (internet of things) and edge analytics, stateful container apps, hybrid and multicloud environments, and reliable

distributed file and object science. Data is encrypted at rest in the client's

legacy storage places from where it is pulled for analysis. MapR software provides real-time access to all data, even old files, including when those files are stored in different cloud-based systems such as Microsoft and AWS. The software can analyze data in transit, such as a payment card authorization request leaving an ecommerce site.

MapR encrypts every megabyte of a client's data with a unique key. This means if a hacker does break in and steals an encryption key, they gain access to only a single megabyte of data.

Use cases include fighting fraud, 360-degree customer view, network security analytics, quickstream analysis (data in transit), business intelligence, new customer acquisition, and offloading from data warehouses and mainframes.

The company's clients include Amex, Ingenico and TransUnion.

Bill Peterson is VP, Industry Solutions at MapR Technologies, Inc. in Boston, Massachusetts, (508) 397-5313, bpeterson@mapr.com, www.mapr.com.

U.S. Commercial Cards — Part 3

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on commercial cards increased 8.8% last year. Consumer card purchase volume was up 7.7%.

American Express commercial card purchase volume reached \$371.76 billion in 2017, up 6.0%.

Spending on U.S. Commercial & Consumer Cards* **COMMERCIAL** CONSUMER 2,803.7 1.046.2 528.8 Visa 331.2 **Purchase Volume** Mastercard 339.3 in 2017 (\$Bil.) 127.1 Americaⁿ *includes credit, debit 371.8 Express & prepaid cards 1.7 Discover © 2018 The Nilson Report

Employees of private companies, government agencies, and nonprofit organizations using credit and debit cards, as well as consumers using various prepaid products (payroll, government benefits, insurance payouts, disaster relief, and more) generated \$1.242 trillion in commercial card purchase volume. This was 22.37% of combined commercial and consumer card purchase volume in 2017. That market share was an increase from 22.19% in 2016.

Visa commercial card purchase volume of \$528.82 billion (up 10.7%), earned the brand a 42.59% market share versus American Express, Mastercard, and Discover. Visa's share of all commercial card product spending was 41.88% in 2016.

Visa consumer card purchase volume of \$2.804 trillion (up 10.5%), earned the brand a 65.08% market share of all consumer card products. It was 63.39% the prior year.

However, Amex's commercial card market share slipped to 29.94% from 30.73% the prior year.

American Express consumer card purchase volume of \$331.22 billion earned it a market share of 7.69% versus all competitors. That compared to 8.61% the prior year.

Mastercard commercial card purchase volume grew 9.2% to \$339.26 billion last year. Its market share of 27.33% was up from 27.23%.

Mastercard consumer card purchase volume grew 4.6% to

\$1.046 trillion. Its market share of those products slipped to 24.28% from 25.00%.

Discover consumer card purchase volume grew 6.3% to \$127.13 billion. Its market share of those products dropped to 2.95% from 2.99%.

At American Express, commercial cards accounted for 52.88% of the brand's combined consumer and commercial purchase volume. That compared to 50.43% the prior year.

Mastercard commercial cards were 24.49% of all purchase volume, and at Visa those products accounted for 15.87%.

When counting credit cards only, combined consumer and commercial purchase volume on cards issued in the U.S. totaled \$3.352 trillion in 2017, up 9.6%.

Of that amount, commercial card purchase volume was \$999.35 billion, up 8.9%. Consumer card purchase volume was \$2.353 trillion, up 9.9%.

For the second year in a row, Visa's share of commercial credit card purchase volume exceeded that of American Express.

Visa's share last year of 39.79% grew from 38.85% in 2016.

American Express's share at 37.20% was down from 38.23%.

Mastercard's share at 22.84%, grew from 22.72%.

In 2017, Visa earned a 58.64% share of consumer credit card purchase volume, an increase from 55.69%. Mastercard followed with 21.88%, down from 22.62%, American Express at 14.08% was down from 16.10%, and Discover with 5.40% was down from 5.59%.

Visa's share of commercial card spending reached 42.59%.

At Visa, 22.38% of credit card purchase volume was generated by commercial cards, down from 23.02%. At Mastercard, 30.72% of credit card purchase volume was generated by commercial cards, up from 30.09%.

Prior issues: 1114, 1113, 1103, 1093, 1072, 1049, 1026, 1002

Installment Credit/Loyalty via Mobile App

from page 1...

offers programs. The cloud-based (Microsoft Azure) platform is provided on a white-label basis. All functions are available to issuers in a stand-alone shopping app or through an SDK they integrate with their existing mobile banking app.

Issuers can customize the parameters of installment credit offers for the type of card product, cardholder history, purchase amount threshold, merchant category, and specific merchant chain. Installments can be financed by the issuer, the retailer, or jointly. No POS terminals are involved. Transactions are initiated by a notification to the cardholder's handset.

Issuers can customize the parameters of installment credit offers.

For loyalty and offers, the myGini platform activates real-time push notifications after receiving a transaction alert from the Visa or Mastercard network. Offers are instantly sent to cardholders without needing them to sign on, log in, or open an app.

MyGini has agreements with offer aggregators and can target those offers to cardholders informed by data analytics from artificial intelligence that examines merchant codes from prior spending. Cardholders are also given the opportunity to "like" certain brands, which further supports targeted offers.

Background tracking algorithms in the app work in-store using GPS and Wi-Fi signals to enable location-based engagement with cardholders.

Other features on the myGini platform provide controls for credit and debit cards, including freezing accounts when cards are believed to be lost or stolen, sending a new PIN, automatic declines of cross-border payments, and more. The app delivers instant discount coupons, creates cash-back offers, manages loyalty points, triggers rewards at a particular merchant after a predetermined number of purchases, and more. Cardholders can also review card statements and make balance inquiries.

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Latin America's Largest Acquirers

from page 1...

Top Acquirers in Latin America 2017

Rank	Company	Transactions (mil.)	Volume (bil.)
1	Cielo	7,400.0	\$ 195.66
2	Rede	4,095.6	\$ 124.75
3	Getnet	1,615.1	\$ 45.14
4	BBVA	1,567.3	\$ 44.77
5	Transbank	1,232.2	\$ 50.26
6	Prisma Medios de Pago	1,187.2	\$ 61.92
7	Serv. de Pago Banamex-EVO	490.4	\$ 23.06
8	BAC Credomatic Network	461.6	\$ 19.22
9	First Data	359.3	\$ 18.72
10	Evertec Group	356.8	\$ 13.81

Rankings are based on consolidated volume and transactions. Figures include all Latin America business. Volume is net (gross minus chargebacks) for American Express, Diners Club, Discover, JCB, Mastercard, UnionPay, Visa, and domestic general purpose payment cards such as Elo, Hipercard, Cabal, and Redcompra.

Argentina, Brazil, Chile, Colombia, Costa Rica, Curacao, the Dominican Republic, Ecuador, Jamaica, Mexico, Panama, Paraguay, Peru, and Puerto Rico.

The largest domestic-only brands were Elo, Hipercard, Cabal, Banricompras,

Redcompra, Magna, Clave, Credomatic, Cashnet, and ATH. Purchase volume for domesticonly, Amex, Diners, and Discover cards was \$65.80 billion. Domestic-only was \$23.90 billion.

When global and domestic brands are combined, these acquirers handled 21.38 billion credit, debit, and prepaid card transactions. Purchase volume was \$707.06 billion. This chart shows growth rates in nominal dollars, which reduces distortions from inflation and conversion to U.S. dollars. Foreign exchange rates do not keep up

...handled 21.38 bil. card transactions valued at \$707.06 bil.

with inflation, which masks the devaluation of a local currency to the U.S. dollar in countries such as Argentina and Venezuela. When a government also manipulates foreign exchange rates, as in Venezuela, the problem is further exacerbated. Concurrently, inflation positively affects debit card usage because cash purchases require an inconvenient number of banknotes to make a payment.

Largest Merchant Acquirers in Latin America 2017

D	anl:		Visa/Mastercard ¹					er Ca		Active	D00	
'17	ank '16	Company, Headquarters	Transactions (mil.)	Chg.		Volume (mil.)	Chg	Transactions (mil.)		Volume (mil.)	Merchant Outlets	POS Terminals
1	1	Cielo, Brazil	5,500.0	<1%	\$	158,095.3	3%	1,900.0	\$	37,561.3	1,410,000	1,690,000
2	2	Rede, Brazil	3,995.0	<1%	\$	122,499.3	1%	100.6	\$	2,251.8	1,010,480	1,157,000
3	4	Getnet, Brazil	1,583.4	27%	\$	44,429.8	31%	31.7	\$	708.5	471,750	700,374
4	3	BBVA Bancomer, Mexico	1,528.3	13%	\$	42,783.6	18%	_	\$	_	177,201	437,605
5	6	Transbank, Chile	1,193.0	22%	\$	47,999.1	23%	39.2	\$	2,263.4	248,077	313,806
6	5	Prisma Medios de Pago, Argentina	1,184.0	11%	\$	61,793.4	36%	3.2	\$	122.4	413,100	385,000
7	8	Serv. de Pago Banamex-EVO, Mexico	476.9	12%	\$	21,738.3	18%	13.5	\$	1,326.2	149,958	158,212
8	15	BAC Credomatic Network, Costa Rica ³	394.4	13%	\$	14,514.1	8%	67.2	\$	4,703.6	98,434	157,642
9	10	First Data, Argentina	357.5	8%	\$	18,603.7	33%	1.8	\$	118.1	279,974	263,419
10	12	VisaNet, Peru	321.9	21%	\$	11,912.5	17%	_	\$	_	185,097	189,901
11	13	Banorte, Mexico	320.2	23%	\$	12,979.9	22%	_	\$	_	116,872	164,667
12	9	Evertec Group, Puerto Rico ⁴	309.2	-21%	\$	11,582.2	-21%	47.6	\$	2,228.8	30,284	43,195
13	16	Elavon/Santander, Mexico	276.0	26%	\$	13,724.4	24%	0.1	\$	20.8	113,488	178,755
14	19	Stone, Brazil	186.7	33%	\$	1,201.9	6%	_	\$	_	41,366	51,575
15	20	Bancolombia, Colombia	137.5	6%	\$	7,108.6	9%	8.4	\$	744.0	125,044	5
16	18	Vero, Brazil	115.1	-31%	\$	3,181.6	-31%	147.6	\$	3,688.6	232,145	1,894,597
17	21	HSBC, Mexico	114.8	6%	\$	4,524.0	10%	_	\$	_	45,873	80,168
18	22	CardNet, Dominican Republic	93.5	6%	\$	4,127.6	1%	0.1	\$	10.6	24,758	44,555
19	25	Banco Davivienda, Colombia	82.9	12%	\$	5,119.0	12%	7.9	\$	731.3	88,171	5
20	28	Banco Nacional, Costa Rica	64.5	14%	\$	2,156.1	10%	_	\$	_	61,363	51,458
21	29	Banco Inbursa, Mexico	64.4	24%	\$	1,964.8	27%	0.6	\$	5.0	65,714	71,640
22	27	Banco de Occidente, Colombia	58.6	-1%	\$	2,516.1	-4%	_	\$	_	25,490	5
23	32	Servicios Digitales Popular, Dominican Republic	58.5	37%	\$	2,694.8	34%	0.2	\$	13.9	15,675	22,421
24	31	BCR, Costa Rica	56.5	18%	\$	1,824.5	15%	_	\$	_	24,349	25,021
25	33	Procesos de Medios de Pago, Peru	46.0	11%	\$	1,917.8	11%	17.6	\$	1,166.6	105,251	121,039
26	34	Scotiabank, Mexico	41.3	9%	\$	1,304.3	11%	29.7	\$	1,067.1	24,025	25,168
27	35	Bancard, Paraguay	39.7	25%	\$	1,595.8	27%	4.4	\$	107.3	25,682	34,737
28	36	BBVA, Colombia	39.0	30%	\$	1,990.0	19%	_	\$	_	17,816	5
29	42	Banco Caja Social, Colombia	35.9	63%	\$	1,260.6	53%	_	\$	_	17,783	5
30	38	Interdin & Diners Club, Ecuador	32.9	24%	\$	2,077.9	27%	36.5	\$	3,629.2	56,506	73,498
31	37	Banco del Pacifico, Ecuador	32.2	14%	\$	1,719.5	14%	_	\$	_	68,071	49,649
32	39	Firstbank, Puerto Rico	21.5	-12%	\$	927.0	-9%	17.9	\$	556.8	4,259	5,132
33	43	Banco Agricola, El Salvador	19.3	3%	\$	929.8	4%	_	\$	_	1,676	3,654
34	44	Scotiabank, Puerto Rico	16.3	-13%	\$	3,235.4	-7%	1.8	\$	858.2	7,653	9,106
35	46	Banco General, Panama	12.2	10%	\$	1,119.7	6%	12.3	\$	383.0	7,911	9,289
36	48	National Commercial Bank, Jamaica	10.8	11%	\$	1,214.8	32%	9.9	\$	906.6	10,926	16,028
37	45	VisaNet, Dominican Republic	9.1	-22%	\$	271.4	-20%	_	\$	_	3,497	3,986
38	47	Republic Bank Limited, Trinidad & Tobago 6	8.7	-12%	\$	8.008	-5%	_	\$	_	6,686	9,149
39	41	Maduro & Curiel's, Curacao ⁷	8.5	9%	\$	1,046.8	2%	17.8	\$	625.0	8,976	9,434
40	49	Elavon, Puerto Rico	6.6	7%	\$	487.2	-3%	0.1	\$	5.0	4,350	6,438
41	50	Banco de Bogota, Colombia	4.8	19%	\$	281.1	12%	_	\$	_	32,202	5

Figures are net (gross minus chargebacks). Change in volume is based on local currency. Transactions in Puerto Rico and the Caribbean were impacted by Hurricane Maria and Hurricane Irma. Foreign exchange regulations in Venezuela in 2017 restricted access to U.S. dollars. This affected the exchangeability between the Venezuelan bolivar and the U.S. dollar. For this reason as well as the additional effect of hyperinflation, which further distorted purchase volume when expressed in U.S. dollars, we did not include merchant acquirers from Venezuela in this ranking. \(^1\)Visa and Mastercard credit, debit, and prepaid cards including Electron and Maestro. \(^2\)Includes American Express, Diners Club/Discover, JCB, and UnionPay, and domestic debit and credit cards. \(^3\)Includes El Salvador, Guatemala, Honduras, Nicaragua, and Panama. \(^4\)Includes U.S. Virgin Islands and British Virgin Islands. \(^5\)POS terminals are owned by Credibanco and Redeban. \(^6\)Includes Grenada. \(^7\)Includes Aruba, Bonaire, and Sint Maarten.

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Credit Card Issuers in MEA

	Durchasa		D. I
2017	Purchase Volume	Cards	Purchase Volume
Rank Issuer, Country	(mil.)	(000)	per Card
1 IsraCard, Israel	\$ 40,135.4	5,050	\$ 7,948
2 Israel Credit Cards, Israel	\$ 22,294.8	2,638	\$ 8,452
3 Leumi Card, Israel	\$ 22,162.8	2,626	\$ 8,441
4 Emirates NBD, U.A.E.	\$ 7,552.2	653	\$ 11,568
5 Absa Bank, South Africa	\$ 6,028.7	3,670	\$ 1,643
6 First Natl. Bank, South Africa	\$ 5,563.8	3,475	\$ 1,601
7 Standard Bank, South Africa	\$ 4,871.7	1,501	\$ 3,246
8 Abu Dhabi Comm., U.A.E.	\$ 4,855.8	781	\$ 6,220
9 Nedbank, South Africa	\$ 4,229.3	1,952	\$ 2,167
10 Natl. Comm. Bank, Saudi Arabia	\$ 3,760.2	646	\$ 5,819
11 Al Rajhi Bank, Saudi Arabia	\$ 3,122.3	1,306	\$ 2,390
12 SABB, Saudi Arabia	\$ 3,036.8	408	\$ 7,437
13 Investec Specialist, South Africa	\$ 2,443.8	118	\$ 20,717
14 Mashreq Bank, U.A.E.	\$ 2,413.4	852	\$ 2,831
15 Samba Financial, Saudi Arabia	\$ 1,900.3	629	\$ 3,019
16 First Abu Dhabi Bank, U.A.E.	\$ 1,849.5	374	\$ 4,946
17 Natl. Bank of Kuwait, Kuwait	\$ 1,835.4	277	\$ 6,627
18 Bank Audi, Lebanon	\$ 1,439.4	235	\$ 6,115
19 Qatar National Bank, Qatar	\$ 1,362.4	103	\$ 13,206
20 Kuwait Finance House, Kuwait	\$ 1,090.3	463	\$ 2,356
21 Riyad Bank, Saudi Arabia	\$ 974.7	574	\$ 1,700
22 Standard Chartered, U.A.E.	\$ 855.3	333	\$ 2,568
23 Boubyan Bank, Kuwait	\$ 693.9	86	\$ 8,102
24 Bank AlJazira, Saudi Arabia	\$ 644.5	319	\$ 2,022
25 Arab National Bank, Saudi Arabia	\$ 473.3	340	\$ 1,392
26 CrediMax, Bahrain	\$ 428.7	92	\$ 4,664
27 Gulf Bank , Kuwait	\$ 383.9	104	\$ 3,683
28 Doha Bank, Qatar	\$ 383.1	52	\$ 7,415
29 Dubai Islamic, U.A.E.	\$ 364.7	133	\$ 2,752
30 Alawwal Bank, Saudi Arabia	\$ 346.4	127	\$ 2,724
31 Arab Bank, Jordan ¹	\$ 319.2	109	\$ 2,934
32 Bank Alfalah, Pakistan	\$ 316.0	365	\$ 865
33 Dubai First , United Arab Emirates	\$ 306.4	107	\$ 2,872
34 Bahrain Credit, Bahrain	\$ 276.0	70	\$ 3,935
35 BankMed, Lebanon	\$ 257.3	32	\$ 8,060
36 Mauritius Comm. Bank, Mauritius	\$ 255.5	141	\$ 1,812
37 Commercial Intl. Bank, Egypt	\$ 239.6	287	\$ 835
38 Al Ahli Bank of Kuwait, Kuwait	\$ 220.2	17	\$ 12,875
39 Habib Bank, Pakistan	\$ 208.6	151	\$ 1,378
40 Diamond Bank, Nigeria	\$ 198.9	111	\$ 1,785
41 Blom Bank, Lebanon	\$ 168.0	66	\$ 2,549
42 National Bank, Egypt	\$ 165.7	1,276	\$ 130
43 Silkbank, Pakistan	\$ 139.3	129	\$ 1,078
44 Credit Libanais , Lebanon	\$ 132.4	31	\$ 4,251
45 Commercial Bank, Kuwait	\$ 117.0	24	\$ 4,948
46 Standard Chartered, Bahrain	\$ 93.9	51	\$ 1,841
47 FirstBank, Nigeria	\$ 79.3	96	\$ 825
48 Co-Operative Bank, Kenya	\$ 75.2	64	\$ 1,172
49 Ahli United Bank, Kuwait	\$ 72.7	34	\$ 2,117
50 MCB Bank, Pakistan	\$ 66.2	70	\$ 943
UnionPay Vica Mactargard Amoy Dingre			1

UnionPay, Visa, Mastercard, Amex, Diners, JCB, and general purpose domestic consumer and commercial credit cards. ¹And Bahrain, Egypt, Lebanon, Palestine, Qatar, U.A.E., U.K., and Yemen. © 2018 The Nilson Report

Debit Card Issuers in MEA

	2017	Purchase Volume	Cards	Р	urchase Volume
Rank	Issuer, Country	(mil.)	(000)	ļ	per Card
1	Al Rajhi Bank, Saudi Arabia	\$ 19,086.1	7,729	\$	2,469
2	Standard Bank, South Africa	\$ 10,994.1	12,283	\$	895
3	Natl. Bank of Kuwait, Kuwait	\$ 9,008.0	1,046	\$	8,615
4	Natl. Comm. Bank, Saudi Arabia	\$ 8,544.6	3,658	\$	2,336
5	Kuwait Finance House, Kuwait	\$ 8,213.7	1,115	\$	7,365
6	Emirates NBD, U.A.E.	\$ 4,732.6	1,359	\$	3,483
7	Absa Bank, South Africa	\$ 4,040.0	14,053	\$	287
8	First Natl. Bank, South Africa	\$ 3,539.9	10,570	\$	335
9	Gulf Bank, Kuwait	\$ 3,277.7	319	\$	10,265
10	Nedbank, South Africa	\$ 2,862.4	6,495	\$	441
11	Riyad Bank, Saudi Arabia	\$ 2,582.0	1,730	\$	1,492
12	Boubyan Bank, Kuwait	\$ 2,499.7	315	\$	7,932
	SABB, Saudi Arabia	\$ 2,370.6	916	\$	2,589
14	Commercial Bank, Kuwait	\$ 2,294.5	741	\$	3,098
15	Arab National Bank, Saudi Arabia	\$ 2,244.7	1,408	\$	1,595
	First Abu Dhabi Bank, U.A.E.	\$ 2,093.6	2,817	\$	743
17	Abu Dhabi Comm., U.A.E.	\$ 1,691.6	704	\$	2,404
18	Guaranty Trust, Nigeria	\$ 1,476.2	5,817	\$	254
	Al Ahli Bank of Kuwait, Kuwait	\$ 1,208.2	163	\$	7,431
20	Dubai Islamic, U.A.E.	\$ 1,112.1	1,225	\$	908
21	Qatar National Bank, Qatar	\$ 1,093.5	278	\$	3,937
22	FirstBank, Nigeria	\$ 969.5	8,484	\$	114
23	Bank AlJazira, Saudi Arabia	\$ 885.7	1,263	\$	701
24	Ahli United Bank, Kuwait	\$ 884.6	122	\$	7,277
25	Grindrod Bank, South Africa	\$ 820.1	10,887	\$	75
26	SAIB, Saudi Arabia	\$ 743.1	264	\$	2,810
27	Mashreq Bank, U.A.E.	\$ 689.2	299	\$	2,304
28	Mauritius Comm. Bank, Mauritius	\$ 667.7	892	\$	749
29	Doha Bank, Qatar	\$ 657.2	264	\$	2,488
30	Alawwal Bank, Saudi Arabia	\$ 645.9	335	\$	1,928
31	State Bank of Mauritius, Mauritius	\$ 525.4	405	\$	1,297
32	Steward Bank, Zimbabwe	\$ 479.8	464	\$	1,034
33	Attijariwafa Bank, Morocco	\$ 467.0	1,177	\$	397
34	Ecobank Group, Nigeria ¹	\$ 453.7	5,210	\$	87
35	Banque Centrale Pop., Morocco	\$ 396.2	4,119	\$	96
36	Bank Audi, Lebanon	\$ 367.4	362	\$	1,016
37	BMCE Bank, Morocco	\$ 330.9	1,169	\$	283
38	Blom Bank, Lebanon	\$ 254.8	188	\$	1,356
39	Arab Bank, Jordan ¹	\$ 244.6	1,007	\$	243
40	Bank Dhofar, Oman	\$ 221.1	387	\$	572
41	Zenith Bank, Nigeria	\$ 215.4	7,005	\$	31
42	Diamond Bank, Nigeria	\$ 205.3	8,778	\$	23
43	Bank Sohar, Oman	\$ 162.0	302	\$	536
44	Standard Chartered, Kenya	\$ 161.3	141	\$	1,141
45	Millenium BIM, Mozambique	\$ 154.2	1,141	\$	135
46	United Bank for Africa, Nigeria	\$ 142.5	9,374	\$	15
47	Postbank, South Africa	\$ 92.9	3,530	\$	26
48	Credit Libanais, Lebanon	\$ 85.6	117	\$	730
49	MCB Bank, Pakistan	\$ 84.0	2,562	\$	33
50	Co-Operative Bank, Kenya	\$ 79.6	3,200	\$	25

Visa, Mastercard, Maestro, and domestic debit & prepaid cards. 1 Includes additional countries. © 2018 The Nilson Report

Top General Purpose/Visa/Mastercard Card Issuers in Middle East & Africa

			ERAL	PUR	POSE CARD	RESULTS					AND	MAS	STERCARD	RESULT	ſS
Issuer, Country	Rank '17	Purchase Volume (mil.)	Rank '17		Total Volume (mil.)	Rank '17	Cards (000)	Rank '17	,	Purchase Volume (mil.)	Rank '17		Total Volume (mil.)	Rank '17	Cards (000)
	17			ф	. ,					, ,		ф			
IsraCard, Israel	1	\$ 40,135.4	3	\$	40,936.1	15	5,050	1		33,615.8	2	\$	34,416.5	11	4,372
Israel Credit Cards, Israel	2	\$ 22,315.7	6	\$	22,813.4	21	2,949	4	\$	18,292.7	10	\$	18,701.3	18	2,573
Al Rajhi Bank, Saudi Arabia	3	\$ 22,208.5	1	\$	95,792.6	6	9,035	2	\$	22,208.5	1	\$	95,792.6	5	9,035
Leumi Card, Israel	4	\$ 22,186.5	8	\$	22,321.1	23	2,663	3	\$	22,186.5	5	\$	22,321.1	16	2,663
Standard Bank, South Africa	5	\$ 15,865.7	4	\$	29,840.5	3	13,784	5	\$	14,677.9	3	\$	28,094.4	3	12,211
Natl. Commercial Bank, Saudi Arabia	6	\$ 12,304.8	2	\$	51,217.8	16	4,305	15	\$	3,760.2	29	\$	4,312.5	45	646
Emirates NBD, United Arab Emirates	7	\$ 12,284.8	5	\$	27,928.7	27	2,012	6	\$	12,282.0 10.727.8	4	\$	27,925.8	21	2,008
Natl. Bank of Kuwait, Kuwait	8	\$ 10,843.5	7	\$	22,361.1	36	1,323	7	\$	8.421.8	7	\$	21,861.6	31	1,194
Absa Bank, South Africa		\$ 10,068.7	10	\$	21,446.4	1	17,723	10	\$	-,	11	\$	17,951.2	2	12,997
Kuwait Finance House, Kuwait		\$ 9,304.0	11	\$	20,600.9	31	1,578	8	\$	9,304.0	8	\$	20,600.9	24	1,578
First Natl. Bank, South Africa		\$ 9,103.8	9	\$	22,267.7	2	14,044	9	\$	9,103.8	6	\$	22,267.7	1	14,044
Nedbank, South Africa		\$ 7,091.7	15	\$	16,614.5	9	8,447	13	\$	4,604.6	16	\$	12,986.4	8	6,823
Abu Dhabi Comm., United Arab Emirates		\$ 6,547.5 \$ 5,407.4	16 31	\$	15,717.3	32 35	1,484	11	\$	6,547.5	12 25	\$	15,717.3	25 28	1,484
SABB, Saudi Arabia				\$	5,831.4		1,324		\$	5,407.4		\$	5,831.4		1,324
First Abu Dhabi Bank, United Arab Emirates		\$ 3,943.1	18 25	\$	14,160.1	20 59	3,191 424	14	\$	3,943.1	13 19	\$	14,160.1	14 54	3,191 424
Gulf Bank, Kuwait		\$ 3,661.5	12	\$	7,210.9	25	2,304	30	\$	3,661.5 998.2	56	\$	7,210.9	49	587
Riyad Bank, Saudi Arabia Boubyan Bank, Kuwait		\$ 3,556.7 \$ 3,193.6	27	\$	19,609.5 6,402.2	61	401	17	\$	3,193.6	21	\$	1,173.6 6,402.2	56	401
Mashreq Bank, United Arab Emirates		\$ 3,102.6	30	\$	5,924.2	41	1,152	18	\$	3,102.6	24	\$	5,924.2	34	1,152
Arab National Bank, Saudi Arabia		\$ 2,718.1	13	\$	19,111.8	29	1,748	19	\$	2,666.7	9	\$	19,004.3	22	1,703
Qatar National Bank, Qatar		\$ 2,455.9	28	\$	6,366.8	62	381	20	\$	2,455.9	22	\$	6,366.8		381
		\$ 2,453.5	47	\$	2,650.2				\$	2,452.5	42	\$	2,650.2	57	127
Investec Specialist, South Africa Commercial Bank, Kuwait		\$ 2,432.5	29	\$	6,158.2	78 49	127 764	21	\$	2,411.5	23	\$	6,158.2	71 42	764
Samba Financial, Saudi Arabia		\$ 1,927.9	14	\$	16,773.3	28	1,787	23	\$	1,900.3	44	\$	2,325.1	47	629
Bank Audi, Lebanon	25	\$ 1,806.7	34	\$	4,067.1	52	597	24	\$	1,795.1	30	\$	4,055.1	48	594
Bank AlJazira, Saudi Arabia	26	\$ 1,530.2	32	\$	4,510.6	30	1,582	25	\$	1,530.2	27	\$	4,510.6	40	950
Guaranty Trust, Nigeria		\$ 1,528.4	26	\$	6,784.4	13	5,825	26	\$	1,528.4	20	\$	6,784.4	9	5,825
Dubai Islamic, United Arab Emirates	28	\$ 1,476.8	19	\$	13,274.0	34	1,357	27	\$	1,476.8	15	\$	13,274.0	27	1,357
Al Ahli Bank of Kuwait, Kuwait		\$ 1,428.4	43	\$	2,915.6	74	180	28	\$	1,428.4	38	\$	2,915.6	67	180
FirstBank, Nigeria	30	\$ 1.048.8	17	\$	14,714.5	8	8,580	34	\$	809.8	14	\$	13,657.6	15	2,889
Doha Bank, Qatar		\$ 1,040.3	38	\$	3,667.4	67	316	29	\$	1,040.3	33	\$	3,667.4	62	316
Alawwal Bank, Saudi Arabia		\$ 992.3	33	\$	4,312.5	55	462	31	\$	992.3	28	\$	4,312.5	51	462
Ahli United Bank, Kuwait		\$ 957.3	50	\$	2,452.1	76	156	69	\$	72.7	85	\$	87.7	90	34
Mauritius Comm. Bank, Mauritius		\$ 923.3	49	\$	2,463.7	46	1,033	37	\$	510.3	59	\$	1,113.4	43	750
Standard Chartered, United Arab Emirates		\$ 855.3	64	\$	982.9	63	333	32	\$	855.3	60	\$	982.9	58	333
Grindrod Bank, South Africa		\$ 820.1	21	\$	9,919.4	4	10,887	33	\$	820.1	17	\$	9,919.4	4	10,887
SAIB, Saudi Arabia		\$ 769.5	37	\$	3,764.1	70	271	55	\$	197.7	62	\$	682.8	75	117
State Bank of Mauritius, Mauritius		\$ 578.5	58	\$	1,374.0	56	461	35	\$	567.1	52	\$	1,340.8	52	445
Arab Bank, Jordan ¹		\$ 563.8	35	\$	3,827.2	42	1,116	36	\$	563.8	31	\$	3,827.2	35	1,116
Steward Bank, Zimbabwe		\$ 481.9	68	\$	481.9	54	465	92	\$	4.6	96	\$	4.6	97	14
Attijariwafa Bank, Morocco	41	\$ 467.1	36	\$	3,791.9	39	1,187	38	\$	467.1	32	\$	3,791.9	32	1,187
Ecobank Group, Nigeria ²		\$ 461.7	22	\$	9,669.0	14	5,214	39	\$	461.7	18	\$	9,669.0	10	5,214
CrediMax, Bahrain	43	\$ 428.7	69	\$	476.4	84	92	41	\$	416.2	65	\$	456.1	81	81
Blom Bank, Lebanon	44	\$ 422.8	56	\$	1,434.4	72	254	40	\$	422.8	50	\$	1,434.4	65	254
Diamond Bank, Nigeria		\$ 404.2	46	\$	2,727.9	7	8,889	42	\$	398.5	41	\$	2,719.8	6	8,883
Banque Centrale Populaire, Morocco		\$ 396.3	24	\$	8,528.1	17	4,125	44	\$	354.9	26	\$	5,567.6	23	1,612
Bank Alfalah, Pakistan		\$ 388.9	45	\$	2,784.3	45	1,043	43	\$	387.7	40	\$	2,783.1	38	1,042
BMCE Bank, Morocco	48	\$ 331.1	39	\$	3,418.5	40	1,172	45	\$	331.1	34	\$	3,418.5	33	1,172
BankMed, Lebanon	49	\$ 324.3	65	\$	770.5	69	275	46	\$	318.7	61	\$	764.9	69	159
Dubai First, United Arab Emirates	50	\$ 306.4	74	\$	319.1	83	107	47	\$	306.4	69	\$	319.1	79	107

General purpose: UnionPay, Visa, Mastercard, Maestro, American Express, JCB, Diners Club, and domestic general purpose consumer & commercial credit, debit, and prepaid cards. V/MC results exclude Maestro and cards with only the Plus or Cirrus brands. ¹And Bahrain, Egypt, Lebanon, Palestine, Qatar, United Arab Emirates, U.K., and Yemen. ²And Ghana, Cote d'Ivoire, Mozambique, Kenya, Rwanda, Sierra Leone, Uganda, Zambia, and 22 other countries.

Top Issuers in the Middle East and Africa

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represents 47 countries, collectively accounted for \$255.82 billion in purchase volume for goods and services in 2017, generated by 154.0 million cards. Cards counted in our survey include Visa, Mastercard, American Express, Diners Club, UnionPay, JCB, and Maestro—the global brands—as well as domestic-only cards.

Visa and Mastercard cards reached 128.3 mil. by year-end.

There were 8 Saudi Arabia-based banks among the top 50 credit card issuers. Kuwait and the United Arab Emirates both had 7 issuers on the list. Also on the list were issuers from Bahrain, Cote d'Ivoire, Egypt, Ghana, Israel, Jordan, Kenya, Lebanon, Mauritius, Morocco, Nigeria, Pakistan, and Qatar. Collectively, the 50 largest credit card issuers accounted for \$151.20 billion in purchase volume from 33.1 million cards in circulation. New to the top 50 was Bahrain Credit, Bahrain.

Debit and prepaid card purchase volume for the 50 largest issuers was \$107.05 billion. There were 148.2 million debit and prepaid cards in circulation at year-end 2017 from issuers in this group. New to the top 50 was Steward Bank, Zimbabwe.

Visa and Mastercard credit, debit, and prepaid cards in the top 50 generated \$225.98 billion in purchase volume, which was 88.3% of all global and domestic-only general purpose card spending from these issuers. Visa and Mastercard cards in circulation reached 128.3 million by December 31, 2017, which was 83.3% of total cards issued by the top 50.

Prior issues: 1113, 1092, 1069, 1045

FICO's Free Cybersecurity Score

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assessed any organization's vulnerability to cybersecurity threats. Using technology

FICO

gained in the 2016 acquisition of QuadMetrics, the FICO Enterprise Security Score was created to monitor risk indicators tied to a company's internet presence, endpoint security data, infrastructure security data, and software and services data. FICO collects threat, incident, surface, and vulnerability data and builds a predictive model by correlating the features to previous breach events.

The FICO Enterprise Security
Score is available at no charge
to small, medium, and large
companies anywhere in the world
with a public-facing internet
asset. It can be delivered in
minutes. Each week the score is
automatically updated. FICO scans
all IP addresses worldwide weekly
and collects over 100 billion
datapoints. Machine learning

analysis includes time-series risk indicators present in the days, weeks, and months prior to a breach and

practices proven to increase the risk of a data breach.

FICO identifies risks associated with lax security practices by

employees. Companies learn their score through a cloud-based portal. They also see how their risk would be assessed by business partners and cyberinsurance underwriters.

Scores range from 300 (high risk) to 850 (low risk). Users get a report that outlines the risk signals which contributed to the score and quantifies the probability of a cybersecurity event.

...available to small, medium, and large companies worldwide.

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David Robertson, Publisher August 28, 2018