

Alipay Expands Outside China

Ant Financial Services Group owns Alipay, the largest processor of online and mobile payments in China. Alipay's online marketplace clients include Taobao, Tmall, and Juhuasuan — the retail marketplaces of Alibaba, China's top ecommerce

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Visa/MasterCard to Cut EMV Authorization Times

The Quick Chip specification from Visa Inc. and the M/Chip Fast specification from MasterCard are available free of charge to POS terminal manufacturers, acquirers, system integrators, and PIN-based debit networks to reduce the processing time of

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BofA Merrill Lynch Merchant Services

Banc of America Merchant Services (BAMS), the second largest acquirer of card payments from U.S. merchants based on purchase volume generated by Visa and MasterCard cards, is moving into Europe this year — as BofA Merrill Lynch Merchant Services

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CGI Financial Messaging Hub

Corporate and consumer, domestic and cross-border legacy payment processing systems challenge information technology (IT) departments at financial institutions. Internal applications, each with particular messaging flows and formats, strain to

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Plastiq Expands Merchant Card Acceptance

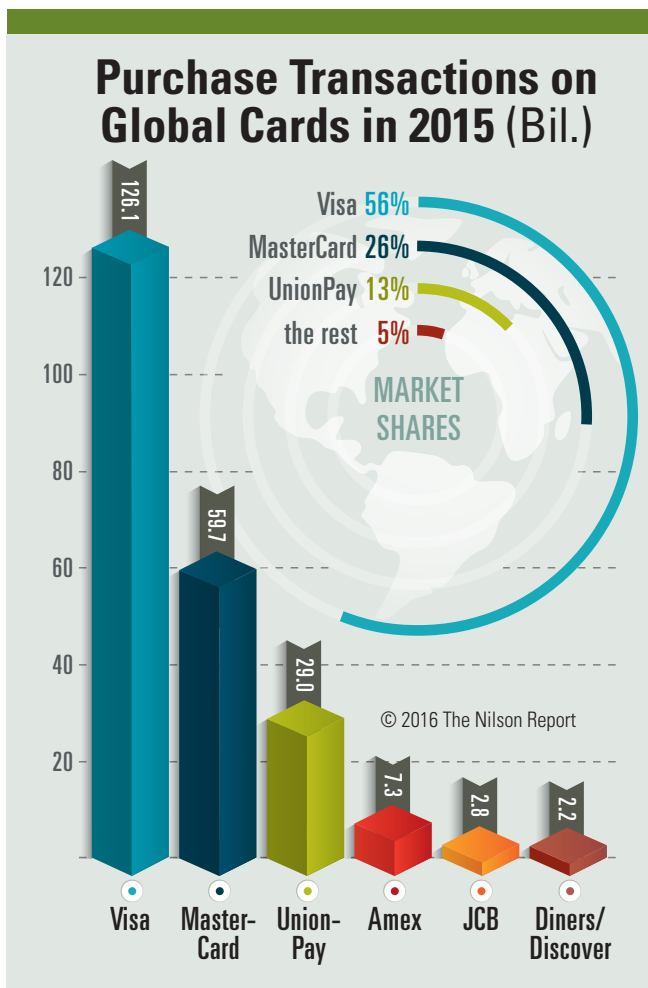
There are more than 50 vertical markets in which businesses have been reluctant to embrace payment card acceptance. The customers of those business are referred to as “captive audience” markets. They have few or no options when paying for rent, condo

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USA Technologies' ePort Interactive

New technology from USA Technologies will be offered to its more than 10,000 customers for use at their unattended, self-service retail locations. The ePort Interactive hardware platform is backed by cloud-based interactive media and content delivery

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Global Cards — 2015

Global general purpose cards carrying Visa, UnionPay, MasterCard, JCB, Diners Club/Discover, and American Express brands generated 227.08 billion purchase transactions at merchants in 2015, an increase of 16.1% or 31.52 billion over 2014. Purchase transactions included all commercial and consumer credit, debit, and prepaid cards. Prepaid cards are included in debit figures. Visa cards, which include both Visa Inc. and Visa Europe, accounted for 55.52% of all purchase transactions worldwide.

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FAST FACTS

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SIGNIFYD is exclusive provider of a fraud prevention app for Magento's NextGeneration Marketplace customers. Adding the app reduces costs through an automated process that advises whether to ship goods or not. It also eliminates liability for any losses or fees from fraudulent orders. Signifyd says it can authorize more orders and give merchants an increase in gross profit of up to 20%. *Skye Spear is Sr. Director of Partnerships and Business Development at Signifyd, (508) 951-4326, skye.spear@signifyd.com, www.signifyd.com.*

HEARTLAND PAYMENT SYSTEMS' stockholders have approved its merger with Global Payments.

TOTAL MERCHANT SERVICES, the 30th largest U.S. acquirer, has made its Groovv software development kit for semi-integrated payments available to software and app developers to enable their customers' compliance with EMV and card industry data breach prevention and mitigation requirements. *Joe Kaplan is CEO, (747) 888-9000, joe@merchantserviceshq.com, www.totalmerchantservices.com.*

SYNIVERSE, a processor that connects more than 1,500 mobile network operators and other telecom companies in nearly 200 countries and territories, has formed a joint venture with First Performance Global. That company's technology facilitates real-time alerts to cardholders through in-app push, SMS, phone call, and email. It can also put controls on purchase limits and other cardholder defined parameters. *Fatema Hamdani is VP at Syniverse, (201) 232-1825, fatema.hamdani@syniverse.com, www.syniverse.com. Ed Broyles is Managing Director at First Performance Global, (478) 845-1919, ed.broyles@firstperformance.com, www.firstperformance.com.*

FIRST DATA will offer merchants Clover Online Store next month. When combined with Clover POS, a tablet-based POS and commerce system, merchants will be able to manage website design, create a virtual shopping cart, and handle multichannel payments on one platform. *Dan Charron is EVP, Global Business Solutions, (404) 890-2580, daniel.charron@firstdata.com, www.firstdata.com.*

NOVO DIA GROUP has signed more than 2,000 farmers' markets and direct marketing farms for its NDG Mobile Market+ application to process EMV transactions via a mobile point-of-sale system. The company's software has received Level 3 EMV certification. *Josh Wiles is President, (512) 827-3344, josh@novodiagroup.com, www.novodiagroup.com.*

MICROWORKERS, an online marketplace that connects more than 775,000 independent contractors in India and Southeast Asia, uses Transpay's cross-border payment platform to pay those workers directly into their own bank accounts in local currency. *Nagarajan Rao is SVP at Transpay, (212) 994-0345, nagarajan.rao@transpay.global, www.transpay.com.*

LINKED2PAY'S Bank Centric Payments platform has integrated with Chargent Payment Processing, payment card and ACH software that handles one-time payment transactions or recurring billings. Chargent, available on the Salesforce AppExchange, offers acquiring through Avidia Bank of Hudson, Massachusetts. *Richard McShirley is CMO at linked2pay, (805) 886-0687, rmcshirley@linked2pay.com, www.linked2pay.com. Cliff Thompson is VP, Business Development, Payment Solutions at Avidia Bank, (978) 567-3658, c.thompson@avidiabank.com, www.avidiabank.com.*

Conferences & Seminars

Emerging Asia FinTech & Agent Banking Summit 2016: May 17-18, 2016. The Parkroyal Hotel, Yangon, Myanmar. Estimated attendance: 100. Cost is \$1,999. **Subscribers to The Nilson Report will receive a 15% discount.** Contact Jose Carpio, Marketing Manager at Magenta Global, (65) 6391-2535, jose@magenta-global.com.sg. See more information at <http://magenta-global.com.sg/emerging-asia-fintech-agent-banking-summit/>.

CNP Expo 2016: May 23-26, 2016. The Loews Royal Pacific in Orlando Florida. Estimated attendance: 1,200. Cost is \$1,800. **Subscribers to The Nilson Report will receive a 20% discount. (Use code NilsonCNP.)** Contact Jennifer Casco at CardNotPresent.com, (978) 761-9199, jenn@cardnotpresent.com. Register at www.cardnotpresent.com/cnpexpo/.

Securing Federal Identity 2016 — SCA Government Event: June 6, 2016. The Ronald Reagan Building and International Trade Center, Washington, D.C. Estimated attendance: 250-300. Nonmember cost is \$349 until May 21, \$399 after that. **Subscribers to The Nilson Report will receive a 20% discount. (Use code NILSDISC, applies to non-member rate only.)** Contact Bryan Ichikawa at SCA, (703) 582-7862, bichikawa@smartcardalliance.org. Register at www.securingfederalidentity.com.

CBN Cashless CardExpo Africa 2016: June 14-16, 2016. The Eko Hotels & Suites, Victoria Island, Lagos, Nigeria. Estimated attendance: 500. Cost is free. Contact Grace Ubeng, 234 (803) 246-4395, uwana@intermarc-ng.com, or Lilian Ekwedike, 234 (803) 714-8651, lilian@intermarc-ng.com. For more information visit www.cardatmandmobilexpo.com.

MAIN STREET SOFTWARES' TranSafe payment gateway service accepts transaction data from Ingenico and Verifone card terminals, magnetic-swipe readers, mobile card readers, and virtual terminals. TranSafe connects to Chase Paymentech, First Data, Global Payments, TSYS, Vantiv, Worldpay, and other processors. *Steve Cook is VP Sales at Main Street Softworks, (352) 244-0544, scook@transafe.com, www.transafe.com.*

VISA CHECKOUT will be available to merchants and cardholders in France, India, Ireland, Poland, Spain, and the U.K. this year, bringing the total number of countries for the online payment service to 22. *Sam Shrauger is SVP, Digital Solutions, (415) 805-5923, sshrauge@visa.com, www.usa.visa.com.*

ACH ALERT monitored \$80 billion in ACH and wire transfer payments in 2015 and successfully stopped the disbursement of \$615 million in fraudulent transactions. The company's Fraud Protection HQ provides a fully integrated dashboard that financial institution customers can use to make pay or no-pay decisions on suspicious ACH and wire activity. *Deborah Peace is CEO, (423) 488-8710, debbiepeace@achalert.com, www.achalert.com.*

TRISOURCE SOLUTIONS has signed a long-term agreement to provide merchant processing services for Bridgeway Payment Systems' direct merchant and agent bank portfolios. *Tom Dunn is President at TriSource Solutions, (843) 785-9140, tdunn@trisourcesolutions.com, www.trisourcesolutions.com. William Alias is CEO at Bridgeway Payment Systems, (662) 281-7220, walias@securityholdingsllc.com, www.bridgewaypaymentsystems.com.*

HSBC FINANCE CORPORATION will pay a civil money penalty of \$35 million to the Office of the Comptroller of the Currency to resolve a regulatory review of billing practices related to credit card add-on products that were sold several years ago, primarily to customers of HSBC Bank Nevada, a former subsidiary of HSBC Finance, as well as to customers of HSBC Bank USA. Refunds of product fees and related charges will be made to customers.

NATIONAL GIFT CARD, a top provider of private label (retail, restaurants, other) prepaid cards for loyalty, incentive, and rewards programs, offers business-to-business program managers and their clients its proprietary application programming interface to send digital products in real time to a recipient's mobile phone. *Eric Thiags is President, (717) 650-0699, e.thiags@ngc-group.com, www.ngc-group.com.*

ARROWEYE SOLUTIONS will provide EMV-enabled and mag-stripe-only prepaid cards to account processor Marqeta. *David Matter is Chief Product Officer at Marqeta, (510) 722-9357, dmatter@marqeta.com, www.marqeta.com. Render Dahiya is CEO at Arroweye, (312) 253-9400, render.dahiya@arroweyesolutions.com, www.arroweye.com.*

ANYWHERECOMMERCE'S Nomad 2 Bluetooth and SRED-enabled device is the first EMV-certified mobile card reader to attain PCI validation as part of a point-to-point encryption (P2PE) deployment. Merchants that implement PCI-validated P2PE technology gain a significant reduction in the time and labor required to complete the annual PCI Self Assessment Questionnaire. *Mitchell Cobrin is CEO, (514) 940-0155, mcobrin@anywherecommerce.com, www.anywherecommerce.com.*

VISA INC. has reached a preliminary agreement to complete its acquisition of Visa Europe. The European Commission required the parties to eliminate the earn-out portion of the transaction that had been part of the original terms. Now, the cash to be paid will be increased by \$2.0 billion (€1.75 billion) —\$855 million (€750 million) payable upon closing and \$1.14 billion (€1.00 billion) plus 4% compound annual interest, payable on the third anniversary of closing. The transaction remains subject to negotiation of the definitive documentation of the new amendment and regulatory approval. Consequently, closing might extend beyond the end of Visa Inc.'s fiscal third quarter on June 30. The total price of the deal is now \$16.89 billion (€13.25 billion) in cash and \$5.70 billion (€5.9 billion) in preferred stock.

TALECH'S mobile point-of-sale tablet and related payment and commerce software will be offered to merchants that use Moneris Solutions to acquire their card payments. *Irv Henderson is CEO at Talech, (914) 843-5555, irv@talech.com, www.talech.com. Chris Lee is President, North American Strategic Partnerships and Emerging Markets at Moneris Solutions, (502) 296-8457, chris.lee@moneris.com, www.monerisusa.com.*

UATP, a global corporate business travel payment service owned and operated by the world's airlines, has added Air Canada as a card-issuing customer. Last year Air Canada served 41 million customers. *Duncan Bureau is VP Global Sales at Air Canada, (416) 263-5352, duncan.bureau@aircanada.ca, www.aircanada.ca. Ralph Kaiser is CEO at UATP, (202) 774-5065, kaiser@uatp.com, www.uatp.com.*

NETS will use J/Speedy, JCB's contactless technology, for domestic Dankort payments from smartphones in Denmark. Nets is the largest acquirer in the Nordic region. It expects there will be more than 3 million Dankort payment apps on mobile phones. Terminals in Denmark will also accept mobile payments from JCB cardholders. *Jeppe Juul Andersen is SVP at Nets, 45 (2) 948-2096, jjuul@nets.eu, www.nets.eu. Oko Okamoto is SVP, Head of Sales and Marketing, Europe at JCB Int'l, 81 (3) 5778-8372, oko.okamoto@jcb.co.jp, www.jcbcard.com.*

Management Changes

Stephanie Ferris has been appointed Chief Financial Officer at **Vantiv**, (513) 900-5131, stephanie.ferris@vantiv.com. **Mike Carlo** has been appointed Global Head of Travel Payments at **Transpay**, (212) 994-0345, mike.carlo@transpay.global. **Robert Capps** has been appointed Vice President of Business Development at **NuData Security**, (604) 800-3711, robert.capps@nudatasecurity.com. **Robin Laskowski** has been appointed Senior Vice President and Chief Information Officer at **Merchants Choice Payment Solutions**, (281) 583-4400, rlaskowski@mcpscorp.com. **Jorgen Nordin** has been appointed Chief Innovation Officer at **Fastacash**, 46 (70) 565-3069, jorgen@fastacash.com. **Mung Ki Woo**, formerly at MasterCard, has been appointed Chief Partnerships and International Officer at **OmnyPay**, (415) 935-0531, mungki@omnypay.net. **Emmett Higdon** has been appointed Director of Mobile at **Javelin**, (925) 225-9100, emmett.higdon@javelinstrategy.com.

VEXILOR, the cloud-based payment acceptance technology of Givex, has been integrated with WeChat, the China-based messaging app with 697 million monthly active users. WeChat also supports peer-to-peer money transfers and retail payments in China. Users pay with WeChat by opening the app and generating a QR code to be scanned by a money transfer recipient or retailer. *Bryan Wang is Director, Marketing at Givex, (416) 350-9660, bryan.wang@givex.com, www.givex.com.*

FIRST INVESTMENT BANK in Bulgaria has launched a host card emulation (HCE) mobile payment service leveraging technology from its card account processor, Tieto, and HCE services provider MeaWallet. *Lars Sandtorv is CEO at MeaWallet, 47 (909) 55-111, lars.sandtorv@meawallet.com, www.meawallet.com. Maris Ozolins is Dir. of Cards at Tieto, (371) 6751-0000, maris.ozolins@tieto.com, www.tieto.com. Teodor Petrov is Dir., Card Service at Fibank, 359 (2) 817-1100, teodor.petrov@fibank.bg, www.fibank.bg.*

CENTRAL BANK OF THE AZERBAIJAN has opened Interbank Card Centre using Tieto's Card Suite to manage domestic transactions by Visa and MasterCard branded cards including authorization, transaction routing, interbank clearing and settlement, and dispute processing. Those functions had been handled by Visa and MasterCard. *Maris Ozolins is Dir. of Cards at Tieto, (371) 6751-0000, maris.ozolins@tieto.com, www.tieto.com. Kamala Gurbanova is Head of Payment and Settlement Systems at CBOA, 994 (12) 493-1122, kamala_gurbanova@cbar.az, www.cbar.az.*

COMPUTOP, a payment service provider to more than 10,000 large ecommerce merchants, will offer its customers access to Diners Club and Discover cards as well as cards from UnionPay, BC Card, RuPay, JCB, and other partners on the Discover Global Network. Merchants will also be able to support ProtectBuy, Discover's 3D Secure payment service. *Ricardo Leite is VP, Discover Global Network, (224) 405-4573, ricardoleite@discover.com, www.discover.com. Ralf Gladis is CEO at Computop, 49 (951) 980-090, gladis@computop.com, www.computop.com.*

Featured Conference

PAYEXPO EUROPE 2016

Two-Day Conference
June 7-8, 2016
ExCeL London, London, U.K.

Topics include: market regulation and evolution, security, authentication and biometrics, future of banking, connected commerce, analytics, loyalty, and localization. Speakers represent: Samsung Pay, Kerv, Waitrose, Telecom Italia, Tandem Bank, The Financial Conduct Authority, Banorte, The Entertainer, Papa John's, and more. Cost is \$1,436 (£999). (Use discount code TNR20.) *Contact Vickie Shoemith at Clarion Events, 44 (20) 7384-7904, victoria.shoemith@clarionevents.com. Register at www.payexpo.com/europe/nilson/.*

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20%

UL'S Brand Test Tool is now certified by the Debit Network Alliance (DNA) to validate processing of the DNA Shared Debit common debit application identifier. *Maxim Dyachenko is Director, Products at UL Transaction Security, 31 (71) 581-3636, maxim.dyachenko@ul.com, www.ul.com. Paul Tomasofsky is Exec. Director at DNA, (201) 781-2119, paul@debitnetworkalliance.com, www.debitnetworkalliance.com.*

STONE PAGAMENTOS, a privately held merchant acquirer in Brazil, has purchased Elavon do Brasil, a merchant card processing joint venture of Elavon and Citibank. Financial terms were not disclosed. *Augusto Lins is Exec. Director at Stone Pagamentos, 55 (11) 3071-1523, alins@stone.com.br, www.stone.com.br. Renata Marucci is Marketing Mgr. at Elavon do Brasil, 55 (11) 3157-3426, renata.marucci@elavon.com, www.elavon.com.*

CELLUM'S mobile payment service, available since 2006, has processed its 100 millionth transaction. Most transactions are for parking, highway toll payments, and lottery ticket purchases. The 100 million transactions represent a total value of about \$257 million. The company has clients in Hungary, Indonesia, Thailand, Austria, and Bulgaria. *Abel Garamhegyi is COO, 36 (30) 606-9841, abel.garamhegyi@cellum.com, www.cellum.com.*

Featured Conference

10TH MOBILE PAYMENT INNOVATIONS SUMMIT 2016

Two-Day Conference
June 14-15, 2016
The Hyatt Fisherman's Wharf
San Francisco, California

Topics include: roles of EMV, tokenization and NFC on adoption developments, maximizing brand and sales with innovations in mobile/digital store dynamics, the front lines of NFC mobile wallet implementation, the complex role of intellectual property in mobile payments, global markets, mobile payment ecosystems and wallets, developing a bespoke mobile payments system using open-source technology, how digital is transforming the landscape for cross-border money transfer and global remittance, funding the digital shopping cycle, enhancing the consumer shopping experience through APIs, challenges and opportunities from today's payment facilitators, biometric and authentication technologies, and contactless payments in the quick service restaurant sector. Speakers represent: Capital One, Wells Fargo, Citi, American Express, Home Depot, TD Bank, IngoMoney, Shopify, Digital Insight, Intel, Reeds Jewelry, ipCapital Group, Double Diamond Group, DailyUse AS, CPI Card, Affirm, Moven, InfoStretch, Lending Club, Western Union, Fiserv, and more. Cost ranges from \$795 to \$1,695. (Use discount code NILSON300.) *Contact Aron Barkan at Strategic Solutions Network, (561) 674-0082, aron@strategicsolutionsnet.com. Register at www.paymentinnovations.net.*

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SAVE
\$300

USA Technologies' ePort Interactive

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management, and answers U.S. government mandates set to begin in the fourth quarter of 2016 related to providing consumers with caloric and nutritional content information on all products sold through vending machines prior to purchase. The screen on the ePort device shows the information a manufacturer prints on the back of packaging for energy drinks and other beverages, candies, and other snacks. The device can also be used to deliver remote refunds, loyalty programs, and multimedia marketing.

... remote refunds, loyalty programs, and multimedia marketing.

Vending machine owners and others can use a dashboard to review metrics and devise marketing and loyalty campaigns as well as analyze results. The company's existing ePort

G9 payment system customers can retrofit their systems with the new hardware. Both offer PCI DSS compliant security, and support traditional magnetic stripe credit and debit cards as well as mobile and card NFC-based payments.

Vending machines are the biggest retail segment of USA Technologies' customer base, which includes kiosks, parking, and commercial laundries. Most hardware buyers also connect to the company's network to access its telemetry services, which provide connections to every acceptance point and capture data about card and cash payments that can be used to increase the speed and frequency of sales.



Michael Lawlor is Chief Services Officer at USA Technologies in Malvern, Pennsylvania, (610) 989-0340 x111, mlawlor@usatech.com, www.usatech.com.

Visa/MasterCard to Cut EMV Authorization Times

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EMV-compliant chip card transactions in the U.S. Cardholders will still insert their card into a reader but will be prompted to remove it in two seconds or less without waiting for the authorization response from the issuer.

VISA

Quick Chip and M/Chip Fast are middleware software updates downloaded to a POS terminal or point-of-sale system.

Neither requires additional testing of a merchant's checkout system if it has already been certified as EMV compliant. No changes to the EMV kernel or applications on the chip are required. Once installed, the middleware works with all signature and PIN cardholder verification methods and does not require merchants to make any changes to how transactions are routed or processed.

Currently, EMV-compliant card transactions in the U.S. operate as they do elsewhere in the world when a card is inserted into a contact-type chip reader. The card is not removed until the information exchange from terminal to networks is completed. This process regularly takes more than 10 seconds. Quick Chip and M/Chip Fast accelerate the card's interaction with the terminal by immediately generating the cryptogram to the terminal that assures the card is not counterfeit. Removing the card before the

No changes are required to the EMV kernel or apps on the chips.

authorization response is received is something that can be done in the U.S. because virtually 100% of transaction are authorized online to card issuers and PINs are not used. Outside the U.S., this is not the

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Visa/MasterCard to Cut EMV Authorization Times

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case in countries where the PIN must be matched to the card. And for a dwindling number of issuers, the card must stay in the terminal to allow for the update of any offline authorization parameters placed on cardholder spending.

Visa middleware works with the Visa AID (application identifier on the chip) as well as the common AID used by PIN-based debit networks



not affiliated with Visa or MasterCard. MasterCard's middleware also works with its AID and the common AID.

Stephanie Ericksen is Vice President, Global Risk Products at Visa in San Francisco, California, (650) 432-2058, serickse@visa.com, www.visa.com.

Ajay Bhalla is Enterprise Security Solutions President at MasterCard

International in London, U.K., 44 (870) 727-4761, ajay_bhalla@mastercard.com, www.mastercard.com.

Plastiq Expands Merchant Card Acceptance

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fees, car leases, private club fees, supplies or services for a business, and more.



Plastiq offers a service to payors who are members of a captive audience and want to use credit or debit cards. It will receive payment in full by credit or debit card for any invoice owed and makes payment to the biller by ACH, wire transfer, or paper check. Effectively, Plastiq becomes the merchant. For its service Plastiq charges a fee of 2.5% of the invoice amount for credit cards and 1% for debit cards. Plastiq's free mobile app lets consumers

take a photograph of their invoice and send that file to Plastiq to initiate a payment. Most invoices contain all of the information Plastiq needs to complete a payment. Plastiq's service gives payors the opportunity to define parameters, including setting partial payment amounts and time of payment.

Vantiv is Plastiq's payment card acquirer in the U.S. On their payment card statement cardholders see two line items — the amount they paid the biller, and the fee they paid Plastiq.

Plastiq began its service in Canada in 2013, and opened in the U.S. a year ago. American Express Corporate Payments has worked with Plastiq to test

its usefulness in business-to-business payments. MasterCard is testing consumer acceptance using its own employees at corporate headquarters.

Plastiq has received \$18.9 million in two funding rounds. It is building a database of businesses in the U.S. and

MasterCard is testing acceptance using its own employees.

Canada that maintain captive audiences, including the method of payment(s) they accept. Eliot Buchanon is Founder at Plastiq in San Francisco, California, (617) 984-9223, eliot@plastiq.com, www.plastiq.com.

CGI Financial Messaging Hub

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efficiently communicate with clearing channels and external payment networks where message standards

... has created more than 80 payment engines over the last 40 years.

evolve and regulations grow in number and become increasingly complex.

CGI has created more than 80 payment engines over the last 40 years, including the architecture for Swift (Society for Worldwide Interbank Financial Telecommunication). CGI's latest technology is a financial messaging hub banks can deploy to modernize older, inflexible IT systems. CGI Intelligent Gateway handles that task, in part, by using algorithm-derived rules to route messages. The gateway's capabilities include utilizing the

distributed ledger model of processing payments, called the blockchain, a feature available through technology CGI licensed from Ripple.

The CGI Intelligent Gateway lets corporate customers upload transaction files to their banks in scores of different custom formats. The gateway immediately identifies any formatting problems before initiating a payment.

CGI's consulting team is available to work with card industry executives to identify ways its financial messaging hub can lower costs in the clearing and settlement of consumer and commercial card payments and more, including preparing internal systems for changes needed to support faster payments — real time and near real time.



Michael O'Loughlin is Director, Global Payment Solutions at CGI in Rochester, New York, (585) 705-4861, michael.oloughlin@cgi.com, www.cgi.com.

BofA Merrill Lynch Merchant Services

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(Europe) Limited. Opportunities exist there among U.S. companies with European subsidiaries. BofAML Merchant Services obtained a license in the U.K. in June 2015 that allows it to acquire throughout the European Union (EU). It expects to handle POS card transactions in the 10 largest markets where its customers operate hotels and retail outlets, and will handle ecommerce business throughout the EU.

BAMS in the U.S. is a joint venture (JV) between First Data and Bank of America. First Data owns

... reduce receivables, improve liquidity, and accelerate payments.

51%. The companies have also been JV partners in Canada since 2014. They are JV partners in BofAML Merchant Services, which will leverage assets in Europe owned by First Data, including an authorization and settlement platform in Ireland.

BofAML Merchant Services has been working for a year with First Data to build the security and omnichannel systems needed to create the core products and services its U.S. customers say they need in Europe. That capacity has been integrated into BofAML's Global Transaction Services platform, which helps large enterprises with complex cash flows. Adding payment processing is expected to help reduce receivables, improve liquidity, and accelerate payments between countries and regions.

Merrill Lynch customers in Europe are also prospects for the new acquiring entity, which supports online transactions with a platform that handles 130+ currencies. Security features available to merchants in Europe include address verification and 3D Secure. Customers will also benefit from the same back-office processes available in the U.S. Michael Reed is Executive VP and Segment Manager at BofAML Merchant Services in London, U.K., 44 (207) 996-6000, michael.reed@bankofamericamerchant.com, www.bankofamerica.com/merchant.

BofA Merrill Lynch



Merchant Services

Alipay Expands Outside China

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company. Although it operates independently, Alipay is an affiliate of Alibaba. Every quarter, Ant Financial, which has been profitable for three years, pays Alibaba 37.5% of its pretax profits. That amounted to \$195 million

in the quarter ended December 31, 2015.

Ant Financial has just received \$4.50 billion in a private placement from China Construction Bank and China Investment Corporation. A

number of analysts predict Ant Financial will file for an initial public offering on the Shanghai Stock Exchange later this year or in 2017. The company is valued at about \$60 billion.

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Alipay Expands Outside China

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Alipay has 450 million active customers, which the company defines as people who have made at least one transaction in the last 12 months. The company does not officially disclose the annual purchase



ANT
FINANCIAL



An Ant Financial Brand

volume of payments it handles from online or mobile devices (Android and iOS phones). However, it does claim a 75% market share of all gross merchandise value (GMV) transacted on Alibaba's retail marketplaces, which over the last four quarters was \$442.35 billion. That would place Alipay online and mobile payments at \$331.50 billion, ranking it as at least the eighth largest merchant acquirer in the world. Its actual volume is higher because it also handles business for ecommerce websites in China that are not connected to Alibaba. By comparison, PayPal, which has a similar business model, handled \$299.80 billion in 2015. Given that 65% of Alipay's transactions are initiated by mobile phones, it is the largest processor of mobile payments for physical goods in the world.

Alipay opened for business in 2004 as an online escrow service, holding consumer payments to Alibaba merchants until buyers received their goods and approved the sale. It continues to operate that escrow service, which makes it difficult for other payment service providers (PSPs) to compete for business among online buyers. The Alipay app lets consumers use their bank accounts as well as their UnionPay credit or debit cards as funding sources for payments. It has direct connections to more than 200 financial institutions in China, so even if customers pay with credit or debit cards, transactions are settled

directly with bank accounts, disintermediating UnionPay, the largest card network in China.

Sellers on Taobao, Tmall, and Juhuasuan do not have contractual relationships with Alipay. They pay Alibaba fees from 0.3% to 5.0% of the value of goods sold to be settled by Alipay, which does not participate in payments that occur on Alibaba's online wholesale marketplaces.

The Alipay mobile app is used for payment to online sellers as well as at the point of sale where

either the consumer scans a merchant's QR code or the merchant scans a QR code on the consumer's

phone. Payments can be made from 1 million taxis, as well as at 600,000 restaurants, supermarkets, convenience stores, and retailers.

QR codes include the Alipay account number of mobile users. Alipay offers consumers multiple login methods including fingerprint, pattern (swipe on screen), or facial recognition.

Other Alipay payment acceptance options in China include utility bills and person-to-person (P2P) money transfers. Consumers can also use a module in the Alipay app to move cash into and out of several money market funds including Yu'e Bao, China's largest, which is

jointly owned by Ant Financial and Tianhong Asset Management. Consumers can pay for their Alipay purchases from their Yu'e Bao money market account.

Alipay has been expanding outside China over the last 18 months. Customers can make QR code-based mobile payments from 50,000 locations in 24 countries including South Korea, Germany, and France. It has contracts with ShopRunner and Borderfree in the U.S. to integrate Alipay ePass, which combines payment acceptance for merchants with shipping logistics and marketing support, with their ecommerce platforms. Alibaba is an investor in ShopRunner. Other PSPs operating in the U.S. offer



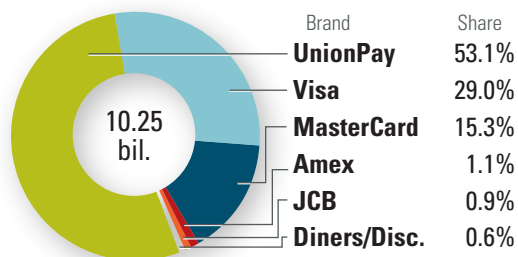
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Global Cards — 2015

from page 1

Debit cards with the Visa brand continued to account for the most purchase transactions

Global Cards in Circulation Credit & Debit 2015



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with a share of 35.50%, followed by Visa credit cards with 20.02%, MasterCard credit cards with 13.14%, MasterCard debit cards with 13.13%, UnionPay credit cards with 6.79%, UnionPay debit

cards with 6.00%, and American Express cards with 3.21%. JCB cards with 1.23% overtook Diners Club/Discover cards with 0.98%.

UnionPay continued to have the highest percentage increase in purchase transactions. Last year UnionPay credit and debit card purchase transactions at merchants grew by 47.0%. Its year-over-year growth of 9.28 billion transactions topped the 8.09 billion increase for MasterCard but trailed an increase of 13.16 billion for Visa.

Debit and prepaid cards accounted for 54.63% of purchase transactions, up from 54.05% in 2014. Visa

purchase transactions were 63.95% debit, up from 63.71%. MasterCard purchase transactions were 49.98% debit, up from 47.86%. UnionPay purchase transactions were 46.90% debit, up from 46.00%.

Total volume of consumer and commercial purchases at merchants combined with cash obtained from credit and debit cards was \$25.718 trillion in 2015, up 16.4% or \$3.630 trillion

Visa cards generated 55.5% of purchase transactions worldwide.

over 2014. Visa and MasterCard accounted for 56.62% of total

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Global General Purpose Cards 2015 vs. 2014

Brand/Card Type	Total		Dollar Volume (bil.)				Transactions (bil.)				Cards	
	Total	Chg.	Purchases	Chg.	Cash	Chg.	Total	Chg.	Purch.	Chg.	(mil.)	Chg.
Visa Credit	\$3,759.23	10.9%	\$3,501.96	11.8%	\$257.27	-0.5%	46.53	10.4%	45.46	10.9%	986.3	4.4%
UnionPay Credit	\$3,221.42	37.9%	\$3,166.25	38.2%	\$55.17	21.8%	15.66	44.0%	15.41	44.5%	432.0	-5.1%
MasterCard Credit	\$2,451.63	9.7%	\$2,264.27	10.5%	\$187.35	1.5%	30.62	10.4%	29.84	11.0%	780.0	4.1%
American Express Credit	\$1,039.70	5.8%	\$1,028.19	5.8%	\$11.51	2.0%	7.37	9.5%	7.28	9.6%	117.8	5.0%
JCB Credit	\$206.90	16.9%	\$200.28	17.2%	\$6.62	10.0%	2.85	20.9%	2.79	21.0%	93.7	6.4%
Diners Club/Discover Credit	\$154.45	-5.8%	\$143.70	-6.0%	\$10.75	-2.8%	2.29	-5.4%	2.24	-5.4%	57.8	1.0%
CREDIT CARD TOTALS	\$10,833.32	16.7%	\$10,304.65	17.5%	\$528.67	2.3%	105.33	14.2%	103.02	14.7%	2,467.6	2.5%
UnionPay Debit & Prepaid	\$6,533.12	26.5%	\$5,585.20	25.5%	\$947.92	32.9%	17.36	40.2%	13.62	49.8%	5,010.0	11.8%
Visa Debit & Prepaid	\$6,239.22	7.2%	\$3,437.95	9.3%	\$2,801.27	4.7%	102.13	10.0%	80.62	12.1%	1,982.5	3.2%
MasterCard Debit & Prepaid	\$2,112.32	16.2%	\$1,096.14	15.6%	\$1,016.18	16.8%	38.82	19.3%	29.82	20.8%	794.2	18.7%
DEBIT CARD TOTALS	\$14,884.66	16.3%	\$10,119.29	18.4%	\$4,765.37	11.9%	158.31	14.9%	124.06	17.4%	7,786.6	10.1%
Visa Totals	\$9,998.45	8.6%	\$6,939.91	10.6%	\$3,058.54	4.3%	148.66	10.1%	126.07	11.7%	2,968.7	3.6%
MasterCard Totals	\$4,563.95	12.6%	\$3,360.41	12.1%	\$1,203.53	14.1%	69.45	15.2%	59.66	15.7%	1,574.2	11.0%
Visa & MasterCard Totals	\$14,562.40	9.8%	\$10,300.33	11.1%	\$4,262.07	6.9%	218.11	11.7%	185.74	12.9%	4,542.9	6.1%
UnionPay Totals	\$9,754.54	30.0%	\$8,751.45	29.8%	\$1,003.09	32.3%	33.02	42.0%	29.03	47.0%	5,442.0	10.3%
CREDIT & DEBIT TOTALS	\$25,717.99	16.4%	\$20,423.94	18.0%	\$5,294.05	10.9%	263.64	14.6%	227.08	16.1%	10,254.2	8.2%

Includes all consumer and commercial credit, debit, and prepaid cards. Some prior year figures have been restated. Currency figures are in U.S. dollars. Change figures for dollar volume reflect a year-over-year comparison in local currency. Visa includes the sum of Visa Europe and Visa Inc. and includes Visa, Visa Electron, and Interlink brands. The Visa card figure excludes Plus-only cards (with no Visa logo). MasterCard excludes Maestro and Cirrus figures. American Express, Diners Club/Discover, and JCB include business from third-party issuers. JCB figures include other payment-related products and some figures are estimates.

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Global Cards — 2015

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volume, down from 60.04% in 2014. UnionPay debit cards accounted for the most total volume last year with \$6.533 trillion. In 2014 the leader was Visa debit cards, which this year grew to \$6.239 trillion.

Purchase volume for goods and services, which excludes cash advances on credit cards and cash withdrawals on debit cards, grew by 18.0% or \$3.110 trillion in 2015. UnionPay debit cards were the most popular payment product based on purchase volume, followed by Visa credit cards, which overtook Visa debit cards. The fourth largest was UnionPay credit cards, followed by MasterCard credit cards, MasterCard debit cards, and American Express credit cards.

Visa and MasterCard accounted for \$50 of every \$100 in purchase

\$34 of every \$100, down from \$36. MasterCard generated \$16 of every \$100, down from \$17.

Debit cards generated 49.54% of Visa's purchase volume, down from 50.10% in 2014. Debit cards generated 32.62% of MasterCard's purchase volume, up from 31.63%. UnionPay debit cards generated 63.82% of its purchase volume, down from 66.02%.

When comparing credit card purchase volume only, Visa's market share of 33.98% was down 174 basis points. UnionPay's share grew by 459 basis points to 30.73%. MasterCard's share dropped 140

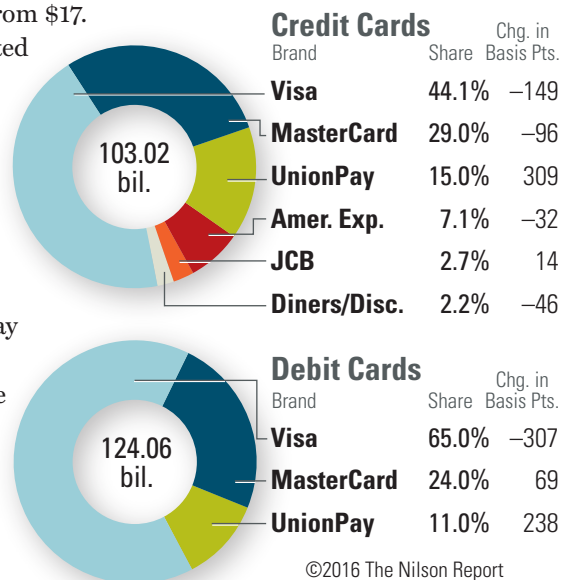
basis points to 21.97%. American Express's share dropped 110

basis points to 9.98%. JCB's share slipped 1 basis point to 1.94%, and Diners Club/Discover's share fell 35 basis points to 1.39%.

UnionPay had a 53.1% market share of 10.25 bil. cards.

volume last year, compared to \$54 in 2014. UnionPay cards generated \$43 of every \$100, up from \$39 in 2014. Visa cards accounted for

Purchase Transactions on Global Cards 2015

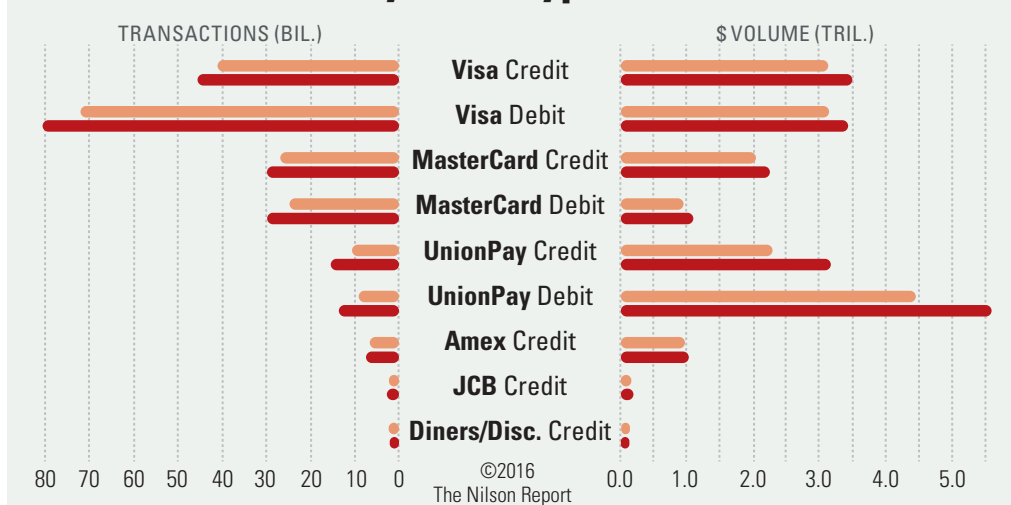


When comparing debit card purchase volume, UnionPay's share grew 309 basis points to 55.19%, which topped Visa and MasterCard combined. Visa's share dropped 283 basis points to 33.97%, and MasterCard's share fell 26 basis points to 10.83%.

Cash advances against lines of credit and cash withdrawals from funds on deposit combined increased by \$519.31 billion in 2015, but as a percent of total volume cash slipped to 20.58% from 21.62%. For Visa, cash accounted for 30.59% of total volume, down from 31.85%. For MasterCard, cash accounted for 26.37%, up from 26.03%. For UnionPay, cash accounted for 10.28%, up from 10.11%. For Diners Club/Discover, cash accounted for 6.96%, up from 6.74%. For JCB, cash accounted for 3.20%, down from 3.40%. For Amex, cash accounted for 1.11%, down from 1.15%.

Credit, debit, and prepaid cards in circulation totaled 10.25 billion at the end of 2015, up 8.2% over year-end 2014. UnionPay

Purchases by Card Type 2014 vs. 2015



added the most cards (506.0 million), an increase of 10.3%, while MasterCard had the highest percentage increase in cards (up 11.0%), adding 156.2 million cards. Visa added 103.6 million cards, up 3.6%, JCB added 5.6 million cards (up 6.4%), American Express added 5.6 million cards, an increase of 5.0%, and Diners Club/Discover added 0.6 million cards (up 1.0%).

UnionPay accounted for 53.07% of global brand cards in circulation, up from 52.09%, followed by Visa with 28.95%, down from 30.23%, MasterCard with 15.35%, up from 14.96%, American Express with 1.15%, down from 1.18%, JCB with 0.91%, down from 0.93%, and Diners Club/Discover with 0.56%, down from 0.60%.

Of the total cards in circulation, 75.94% were debit, up from 74.61%. Debit cards in circulation grew by 716.3 million compared to a 61.4 million increase for credit cards.

Debit cards accounted for 92.06% of the UnionPay card base, up from 90.78%. For Visa, 66.78% of its cards

were debit, down from 67.03%. For MasterCard, 50.45% of its cards were debit, up from 47.18%.

Visa, MasterCard, American Express, and Discover brand credit cards issued in the U.S. generated 27.58% of global credit card purchase volume, down from 30.13% in 2014.

For Visa, the percent change in credit card purchase volume was greater on cards issued outside the U.S. (up 12.4%) than those issued inside the

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Global Debit & Prepaid Cards

Category	Visa		MasterCard		UnionPay	
	2015	Chg.	2015	Chg.	2015	Chg.
Transactions per Card	51.52	6.5%	48.88	0.5%	3.47	25.4%
Purch. Trans. per Card	40.67	8.6%	37.55	1.8%	2.72	34.0%
Purch. Trans. Share	78.94%	147 bps	76.82%	95 bps	78.42%	507 bps
Cash Trans. per Card	10.85	-0.4%	11.33	-3.4%	0.75	1.5%
Cash Trans. Share	21.06%	-147 bps	23.18%	-95 bps	21.58%	-507 bps
Avg. Amt. per Trans.	\$61	-2.5%	\$54	-2.7%	\$376	-9.8%
Average Purch. Amt.	\$43	-2.5%	\$37	-4.3%	\$410	-16.3%
Average Cash Amt.	\$130	1.9%	\$113	1.9%	\$253	17.1%
Total Volume per Card	\$3,147	3.9%	\$2,660	-2.1%	\$1,304	13.1%
Purch. Vol. per Card	\$1,734	5.9%	\$1,380	-2.6%	\$1,115	12.2%
Purch. Volume Share	55.10%	106 bps	51.89%	-25 bps	85.49%	-70 bps
Cash Vol. per Card	\$1,413	1.5%	\$1,280	-1.6%	\$189	18.9%
Cash Volume Share	44.90%	-106 bps	48.11%	25 bps	14.51%	70 bps

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Global Credit Cards

Category	Visa		MasterCard		Amer. Express		UnionPay		JCB		Diners/Discover	
	2015	Chg.	2015	Chg.	2015	Chg.	2015	Chg.	2015	Chg.	2015	Chg.
Transactions per Card	47.18	5.8%	39.26	6.1%	62.60	4.3%	36.25	51.7%	30.44	13.6%	39.66	-6.3%
Purch. Trans. per Card	46.09	6.2%	38.26	6.6%	61.81	4.4%	35.68	52.5%	29.82	13.8%	38.69	-6.4%
Purch. Trans. Share	97.68%	42 bps	97.45%	47 bps	98.73%	9 bps	98.45%	32 bps	97.95%	15 bps	97.54%	-2 bps
Cash Trans. per Card	1.09	-10.5%	1.00	-10.4%	0.80	-2.6%	0.56	25.5%	0.63	6.0%	0.97	-5.7%
Cash Trans. Share	2.32%	-42 bps	2.55%	-47 bps	1.27%	-9 bps	1.55%	-32 bps	2.05%	-15 bps	2.46%	2 bps
Avg. Amt. per Trans.	\$81	0.4%	\$80	-0.6%	\$141	-3.4%	\$206	-4.3%	\$73	-3.3%	\$67	-0.5%
Avg. Purchase Amt.	\$77	0.8%	\$76	-0.4%	\$141	-3.4%	\$205	-4.4%	\$72	-3.2%	\$64	-0.7%
Avg. Cash Amt.	\$239	6.5%	\$240	8.8%	\$123	-0.2%	\$227	2.2%	\$113	-2.4%	\$191	2.0%
Total Volume per Card	\$3,811	6.2%	\$3,143	5.4%	\$8,826	0.8%	\$7,457	45.2%	\$2,208	9.9%	\$2,673	-6.8%
Purch. Vol. per Card	\$3,551	7.1%	\$2,903	6.1%	\$8,728	0.8%	\$7,329	45.5%	\$2,137	10.1%	\$2,487	-7.0%
Purch. Vol. Share	93.16%	78 bps	92.36%	62 bps	98.89%	4 bps	98.29%	23 bps	96.80%	20 bps	93.04%	-22 bps
Cash Vol. per Card	\$261	-4.7%	\$240	-2.5%	\$98	-2.8%	\$128	28.2%	\$71	3.4%	\$186	-3.8%
Cash Vol. Share	6.84%	-78 bps	7.64%	-62 bps	1.11%	-4 bps	1.71%	-23 bps	3.20%	-20 bps	6.96%	22 bps

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Global Cards — 2015

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U.S. (up 10.8%). The number of Visa credit cards in circulation inside the U.S. increased by 22.3 million compared to a 19.2 million increase outside the U.S.

For MasterCard, the percent change in credit card purchase volume was significantly greater on cards issued outside the U.S. (up 11.8%) than those issued inside the U.S. (up 7.4%). The number of MasterCard credit cards in circulation increased by 20.0 million

outside the U.S. compared to a 11.0 million increase inside the U.S.

For American Express, the percent change in credit card purchase volume was greater on cards issued outside the U.S. (up 8.3%) than on those issued inside the U.S. (up 4.8%). The number of Amex cards outside the U.S. increased by 2.9 million, while the number inside the U.S. increased by 2.7 million.

Alipay Expands Outside China

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Alipay payment acceptance but not logistics or marketing support.

Contracts have been signed with online payment service providers including Adyen, CyberSource, Worldpay, Stripe, and Ingenico Payment Services (formerly GlobalCollect). A partnership with Wirecard announced in November 2015 integrates Alipay QR code payment functionality with POS

ePass combines payment with shipping and marketing support.

terminals at retailers in Europe that use Wirecard as their acquirer. All Marriott Hotels in Asia will accept Alipay QR code-based payments by the end of 2016. Ant Financial has taken a 25% equity position in One97 Communications in India, which operates the Paytm mobile payment service in that country.

Modules in the Alipay mobile app allow users in China to book hotels, call a taxi, share

a restaurant bill, and more, including receiving offers from merchants. Alipay wants to collaborate with European marketers interested in leveraging the geolocation capabilities in smartphones to deliver discount pricing and other special offers to Chinese travelers in Europe. Initial efforts will focus on the U.K., Germany, Italy, and France — the top markets for Chinese

tourists. Alipay will provide the portal and the tools marketers need to upload content

and manage information to be delivered to Alipay travelers before they leave China and when they arrive in Europe.

Rita Liu is Head of EMEA at Alipay in London, U.K., 44 (207) 258-0660, yu.lyly@alipay.com, <https://intl.alipay.com>.

Sabrina Peng is President at Alipay International in Hangzhou, China, 86 (571) 2688-8888 x37610, sabrina@alipay.com, <https://intl.alipay.com>.

Top Merchant Acquirers Worldwide

Acquirer	Volume (bil.)
1. Chase Comm. Sol.	\$949.30
2. First Data	\$858.56
3. Vantiv	\$771.75
4. Bank of America*	\$725.34
5. Global Payments	\$545.74
6. Worldpay	\$532.18
7. Elavon	\$463.31
8. Alipay	\$331.50
9. Barclays	\$320.75
10. PayPal	\$299.80
11. Wells Fargo*	\$283.16

Volume represents business acquired anywhere in the world. Figures are for calendar year 2015 except Alipay and PayPal, which are for the four quarters ended March 31, 2016. Unlike other companies shown here, Alipay does not own contracts with merchants. Global Payments volume includes Heartland Payment Systems. *Joint ventures with First Data, although volume is not included with First Data figures shown here. Some PayPal volume is also counted with Chase and Wells Fargo. © 2016 The Nilson Report

David Robertson, Publisher

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