

This is a high-level industry news and business intelligence update bulletin. For further information on any of the items contained within the bulletin or to discuss the potential impact of these items on your business, please contact Savantor on info@savantor.com.

Savantor Limited
68 Lombard St
London EC3V 9LJ
Tel: 0870 734 6250
Fax: 0870 734 6251
email: info@savantor.com
www.savantor.com

Items in this issue:

Savantor's View	1	Branch-based challenger Metro Bank valued at £1.6bn on IPO	4
The increasing prevalence of biometrics in payments	1	NatWest mobile security flaws exposed	4
Products and Initiatives	2	Blockchain recruitment stepped up at major banks and vendors	4
Lloyds partners Google on data analytics	2	Cashless society not in the near future	4
Google rumoured to be bringing Android Pay service to the UK	2	UK contactless spending trebles in 2015	5
MasterCard works to reduce false declines	2	Payment Systems Regulator recommends sale of VocaLink shares by banks	5
HSBC to roll out voice and Touch ID to 15 million UK customers.....	2	MasterCard contactless transactions in Europe pass one billion milestone in 2015.....	5
Curve initiative to bridge the gap between cards and mobile payments.....	3	Mobile Money	5
Market News	3	US Bank and Bank of America offer real-time mobile P2P	5
RBS to cut 550 jobs	3	Icici introduces HCE-based contactless mobile payments.....	6
SIA confirms IPO plans	3	National mobile money network launched in Peru	6
Migration to e-payments "gives huge boost to GDP and jobs"	3		

Savantor's View

The increasing prevalence of biometrics in payments

Biometric technology is not a new concept in payment card processing but its use is gradually becoming more mainstream.

Many are already familiar with the use of fingerprint identification for use with Apple devices, which has now been extended to Apple Pay for contactless payments as a means of ensuring security. Samsung Pay, to be launched shortly in the UK, will also use fingerprint identification.

Last month, HSBC announced that it is preparing for the roll out of voice and fingerprint recognition; first direct customers will be able to enrol for voice ID in the coming weeks, followed by HSBC by the summer. Touch ID is already currently available on Apple mobile devices for both sets of customers.

Worldpay also announced at the end of last year that it was undertaking trials involving fingerprint scanning.

Barclays Bank has introduced voice and fingerprint recognition for a select number of customers, while the new challenger bank Atom is planning to use face and voice biometrics as core credentials for customers logging in to banking apps.

Lloyds Banking Group has been testing the use of heartbeats as an authentication mechanism, although use of this technology is not believed to be launched in the consumer market in the immediate future.

In the US, Capital One customers can now check their balances and pay their bills using voice recognition, by talking to Amazon's Alexa virtual assistant. In the UK, Lloyds Bank has also been exploring the capabilities of Alexa in relation to its online banking service.

Facial recognition is one of the areas also currently being explored by Worldpay as a security mechanism, by embedding small cameras into card readers that would capture an image of a consumer's face when they enter their pin number. The captured image would then be matched against an existing profile that is linked to the card.

The payment schemes are also exploring the use of biometric technology: Visa has developed a specification to embed biometric data - whether from palm, voice, iris or facial recognition - into chip cards. MasterCard is developing a new biometrics payment system called MasterCard Identity Check, whereby users set up a biometric profile for online shopping and then verify transactions by fingerprint or

Whilst Savantor Limited ("Savantor") has used reasonable efforts to obtain information from sources which it believes to be reliable it does not make any representations or give any warranties or guarantees that the information provided or any opinions expressed herein are accurate, reliable or complete and none should be relied upon as statements of fact. In no event, including (without limitation) negligence, and in no circumstances will Savantor be liable for any loss or damage of any kind whatsoever, including (without limitation) any direct, special indirect or consequential damages, caused by the use of or reliance upon information provided or opinions expressed herein.

facial recognition. Apparently a user making a mobile purchase with their MasterCard will be asked to take a "selfie" to verify the purchase.

Use of biometric technology as a means of security is supported by new consumer research findings from YouGov which indicate that over a third (37%) of online consumers agree traditional passwords have become an outdated security measure. Apparently 38% of British consumers tend to use the same password across most of their online accounts while 55% say they rarely update their passwords. The findings also revealed that 78% of the adults questioned are confident that their body is unique enough to be used as a password and that 74% believe this will become the default password mechanism in the future.

Biometrics and its use in the payments arena is a fascinating technology – the initiatives mentioned above give an indication of how the technology is almost seamlessly working its way into being an accepted means of identification. At last – the ubiquitous taking a 'selfie' can be considered as more than just an act of vanity.....

Products and Initiatives

Lloyds partners Google on data analytics

Lloyds Banking Group is collaborating with Google on a project to analyse its customer data for behaviour trends. The partnership with Google allowed Lloyds to test Google's Big Data platform technologies and analytics on non-personal behavioural data using a secure Lloyds Banking Group account on Google Cloud Platform.

In a trial project, a joint Lloyds and Google team was able to analyse a year's worth of front-end analytical data in under a minute.

Lloyds has created a dedicated digital analytics unit that looks to work with a myriad of partners to further its knowledge and prototype applications using the latest tools. (Source date: 4 March 2016)

Google rumoured to be bringing Android Pay service to the UK

The Telegraph newspaper has reported that Android Pay will be available in the UK from the end of next month to users with phones running up-to-date versions of Android. Launched in the US in September, Android Pay lets users make contactless payments with their handsets and carry out in-app transactions.

Google has not confirmed any UK launch and there are no details on partner banks. In December it said that it was working to bring the service to several countries in 2016, beginning with Australia. (Source date: 29 February 2016)

MasterCard works to reduce false declines

MasterCard is working to help banks cut down the number of false declines on card transactions with the roll out of more precise behavioural fraud analytics. With one out of every six cardholders experiencing at least one decline because of suspected fraud in the past year, MasterCard says its new technology bundle will provide deeper insights into cardholder spending habits in a split-second. Dubbed MasterCard IQ, the core products include an authorisation and assurance tool.

Research by Javelin shows that the value of false declines per year has reached \$118 billion, more than 13 times the total amount lost annually to actual card fraud (\$9 billion). Not only are such refusals more likely to hit more affluent consumers who spend more on big ticket items, they also have a negative rebound in customer attitude towards the bank and merchant. (Source date: 19 February 2016)

HSBC to roll out voice and Touch ID to 15 million UK customers

HSBC is preparing for the roll out of voice and fingerprint recognition for calling or logging into mobile banking. First direct will begin to enrol customers for voice ID in the coming weeks and will be followed by HSBC by the summer. Touch ID is currently available on all Apple mobile devices for both HSBC and first direct.

The voice recognition software from Nuance Communications will be made available to all of the bank's 15 million customers in the UK. For customers that choose to opt-in, they simply enrol their 'voice print' and are no longer required to remember or recite their current telephone security password letters or PIN.

The launch of biometric technology for HSBC and first direct is supported by new online consumer research findings from YouGov which reveal over a third (37%) of consumers agree traditional passwords have become an outdated security measure. (Source date: 19 February 2016)

Curve initiative to bridge the gap between cards and mobile payments

Curve, a London-based startup that aims to bridge the gap between card-based and mobile payments by replacing multiple cards with a single piece of plastic and a mobile app, has launched with support from a group of notable fintech investors.

Similar to Coin in the US, Curve allows people to combine an unlimited number of bank cards into one physical payment card, supported by a mobile app that gives users a consolidated view of their payments. Bundled services include the ability to see all transactions in one place, access to low foreign currency rates with no fees, and using Amex at places it currently is not accepted.

Built on the MasterCard Network, the Curve card supports Chip and Pin, magstripe and contactless technology. Users scan their cards into the app, which syncs them with the Curve card. The Curve app can be used to switch between cards with a single swipe and displays every transaction made, with a running total across each month. (Source date: 17 February 2016)

Market News

RBS to cut 550 jobs

Royal Bank of Scotland is to cut 550 jobs as it scales back on in-person advice to customers with less than £250,000 to invest. The news was leaked to the FT in a classic PR campaign to soften the market and test the waters ahead of a formal statement on the plans. The move will hit 220 financial advisory roles and 200 further staff who provide insurance protection advice.

RBS, which previously provided in-person advisory services to clients with more than £100,000 to invest says the shift reflects a reduction in demand for personal services following the introduction of new rules under the Retail Distribution Review (RDR). The bank is instead planning to roll out an automated advisory platform that will be made available to all customers with more than £500 in liquid assets. (Source date: 14 March 2016)

SIA confirms IPO plans

Italian payments processor SIA has set in motion plans for a stock market listing on Borsa Italiana before the year-end. Confirmation of the IPO plans came as the company reported 15.4% growth in revenues for 2015 to €388.8 million and a 21% spike in net profit to €73 million.

SIA's business operations span the wholesale and retail markets. In 2015, the group handled the overall settlement of 9.9 billion transactions, 3.3 billion card transactions and 2.8 billion payment transactions relating to credit transfers and collections. On the financial markets, the number of trading and post-trading transactions rose to 41.7 billion from the 30.2 billion of 2014, an increase of 38%.

The company expects to sell the majority of its capital in the listing on the MTA markets in Milan. With ebitda at €116.6 million for 2015 and assuming a mid-range multiple valuation at 13 times earnings, the sale could potentially fetch up to €1.5 billion. (Source date: 11 March 2016)

Migration to e-payments "gives huge boost to GDP and jobs"

A new Visa-commissioned study claims that the rise of electronic payments over the last five years has added nearly \$300 billion to GDP across 70 countries and created millions of jobs. For the study, Moody's Analytics analysed the impact of electronic payments on economic growth across 70 countries, which between them make up almost 95% of global GDP, between 2011 and 2015.

According to the report, increased use of electronic payment products, including credit, debit and prepaid cards, added \$296 billion to GDP, while raising household consumption of goods and services by an average of 0.18% per year, with developing countries seeing the biggest boost.

The Moody economists also estimate that over the five years the rise of e-payments resulted in the equivalent to 2.6 million new jobs being created on average, annually. The two countries with the greatest average job increases were China and India, which, Moody's notes, both had large gains in employment due to the combination of fast growing labour productivity and increased card usage.

The study also suggests that the electrification of payments benefits governments and contributes to a more stable and open business environment while shrinking the grey economy. Across the 70 countries, Moody's found that every one per cent increase in usage of electronic payments could produce, on average, an annual increase of approximately \$104 billion in the consumption of goods and services. Assuming all future factors remain the same, this could result in an annual average increase of 0.04% to GDP attributable to card usage. (Source date: 10 March 2016)

Branch-based challenger Metro Bank valued at £1.6bn on IPO

Six years after the opening of its first store in London in 2010, branch-based challenger Metro Bank has achieved a £1.6 billion valuation after listing on the London Stock Exchange. Shares opened on Thursday 10 March, the first day of unconditional dealing, almost 10 per cent up from their placement price. The bank had initially planned to float at £24, but last month it cut the target price to £20 amid a sell-off in banking stocks. By mid-morning the stock stood at £21.95.

Unlike most other digital- and mobile-first challengers, Metro Bank has majored on branch-based access, providing free coin counting for customers and non-customers, instant printing and replacements for lost or stolen debit cards and safe deposit boxes for customers' valuables. In 2015, the bank welcomed over 200,000 new customers, up 46% year-on-year, taking the number of accounts to 700,000. It also more than doubled lending to £3.5bn, up 123%, and grew deposits to over £5bn, an increase of 78%. (Source date: 10 March 2016)

NatWest mobile security flaws exposed

NatWest and RBS are to upgrade mobile security procedures after BBC journalists broke into an online bank account and removed money.

BBC Radio 4's You and Yours conducted their investigation after being contacted by a number of people affected by a 'SIM swap fraud' scam. The SIM swap allows fraudsters to block the customer's phone and redirect all calls and messages to their phone instead. As some banks text details and allow users to make payments with their phones, this SIM swap can allow criminals access to online bank accounts.

The You and Yours team ran the investigation with the programme producer's NatWest bank account and were successful in transferring £1.50 without any knowledge of PIN, passwords, or security question answers. A reporter was able to change the PIN and password and block the account owner from the account.

NatWest will introduce a number of changes as a result of the investigation and acknowledges that SIM swap fraud is an emerging issue across the industry. The bank is working with Financial Fraud Action UK and mobile phone providers to combat the issue. (Source date: 4 March 2016)

Blockchain recruitment stepped up at major banks and vendors

Recruitment for blockchain specialists at major banks and vendors appears to be increasing, as Visa, Thomson Reuters and BNY Mellon post ads on job boards.

Visa, which has participated in Chain's recent \$30 million funding round and run proof-of-concept tests on the use of distributed ledger technologies for remittances, is hiring a senior staff software engineer to work at its labs in Foster City California as part of the Visa research team.

BNY Mellon, which was one of the first banks to begin playing with bitcoin, is looking to employ a 'blockchain senior product manager', at its outpost in Palo Alto on a \$240K salary package.

Thomson Reuters meanwhile is searching for a "talented developer" who will "work on and be responsible for analysis, design and implementation of complex software solutions using Blockchain technologies (Ethereum etc)". (Source date: 3 March 2016)

Cashless society not in the near future

New figures from the UK's Link ATM network reveal that consumer demand for physical cash shows little signs of abating, with cash withdrawals from Link's network of over 70,000 ATMs in 2015 amounting to a record £128 billion - made during over two billion visits.

The total number of cash withdrawals only grew slightly in 2015 (by 0.8%) with the value of those withdrawals increasing by 2%. The amount cash machine users withdrew also went up - with the average withdrawal value increasing from £61.25 in 2014 to £61.93 in 2015. (Source date: 1 March 2016)

UK contactless spending trebles in 2015

Spending on contactless cards in the UK rose more than three-fold in 2015 to reach £7.75 billion, propelled by an increase in the spending limit to £30 and the ongoing popularity of transit payments on the London transport network. The new figures from the UK Cards Association mean that total contactless spending in 2015 was more than double the preceding seven years combined.

The monthly data shows that contactless spending grew to £1.2 billion in December, a rise of 17% on the previous month. There were 140 million contactless transactions in December - equivalent to 52 every second.

The data is supported by new figures from Barclaycard, which saw contactless spending in pubs and bars, pharmacies, supermarkets and on commuter transport rocket in 2015, with overall spending up 164%. Payments processor WorldPay also reported a 160% increase on contactless transactions, with monthly payments using the technology peaking at 45 million.

In 2020 new regulations will come in to force requiring all card terminals in the UK to be contactless enabled. (Source date: 26 February 2016)

Payment Systems Regulator recommends sale of VocaLink shares by banks

The UK's Payment Systems Regulator (PSR) says banks should sell their stakes in VocaLink to help increase innovation and competition in the nation's critical payments infrastructure. The recommendations follow a review by the watchdog into the ownership and competitiveness of the Bacs, Faster Payments System and the Link network. These systems are currently owned by a relatively small number of banks, which also control VocaLink, the single infrastructure provider that they rely on to process payments.

In the UK, VocaLink processes over 90% of salaries, more than 70% of household bills and almost all state benefits. Nearly every business and person in the UK uses its technology and last year the company processed over 11 billion transactions with a value of £6 trillion. The PSR believes that the common ownership of VocaLink by a small number of banks is having a "negative impact on innovation and competition in the industry".

The PSR is also recommending the introduction of a new competitive and transparent procurement process for future payments networks to enable other vendors to enter the market, as well as the introduction of a common messaging standard for communicating with the infrastructure provider in order to level the playing field and ease access for new entrants. The full report is open for consultation until 21 April. (Source date: 25 February 2016)

MasterCard contactless transactions in Europe pass one billion milestone in 2015

The number of contactless transactions on MasterCard and Maestro cards in Europe passed the one billion mark for the first time in 2015, an increase of 150% on the previous year. New data reveals the number of cards, mobile phones or other devices tapping rose by 121%, and the total MasterCard and Maestro spend on contactless transactions was up by 183% year on year.

In Europe alone, there are already over 10 countries with over 5 million contactless cards or devices in circulation for each of them. These are accepted in 74 countries around the world, including Estonia and Iceland, which have recently been added to Europe's contactless map. Frontrunners in Europe include the Czech Republic and Poland.

There was also a 72% increase in the number of contactless merchant locations compared to 2014. MasterCard estimates that MasterCard or Maestro contactless cards or devices can now be used at over 4 million merchant locations worldwide. (Source date: 18 February 2016)

Mobile Money

US Bank and Bank of America offer real-time mobile P2P

US Bank and Bank of America have become the first banks to offer real-time peer-to-peer money transfers to consumer mobile phones over the clearXchange network. ClearXchange acts as a clearing house for person-to-person online payments transfer, enabling customers to send funds directly from their bank accounts to the recipients' using only an email address or mobile phone number. The platform is owned by Bank of America, JPMorgan, Wells Fargo, Capital One and US Bank, making it open to more than 100 million people.

US Bank and Bank of America are the first to go live on the system, with other consortium members expected to follow later this year. Between them, the early adopters have a combined reach of nearly 22 million mobile banking customers in the US.

In America the P2P payments market is seen as a huge, fast-growing market. Individuals transferred some \$200 billion to one another using mobile phones and computers last year, according to Javelin Strategy & Research. (Source date: 9 March 2016)

Icici introduces HCE-based contactless mobile payments

Icici Bank has launched an HCE-based contactless mobile payments service, enabling nearly 30 million customers to make in-store purchases with a tap of their smartphones. The bank began rolling out contactless debit and credit cards nearly a year ago, but is now adding NFC payments to its Pockets app in what it claims is an Indian first.

By using HCE (Host Card Emulation) technology for its in-house built platform, the bank lets customers store virtual versions of their physical Visa and MasterCard cards in its cloud server, meaning detail are not on the handsets. For each payment, a one-time unique token number is created by the bank's server, which is encrypted and sent to the merchant's terminal, without disclosing any card information.

The bank expects this to be a big game changer in the Indian payment industry, "as it will transform the smartphone into a virtual wallet." (Source date: 15 March 2016)

National mobile money network launched in Peru

A national mobile money network has been launched in Peru, with the aim of drawing five million of the country's unbanked into the formal banking system. The low-tech mobile money programme has been launched by Peru Digital Payments, a \$10 million special-purpose company created by 34 of the country's leading banks, with the support of major carrier networks.

With four-in-five of the Peru's 30 million citizens operating outside of the formal banking system, the network, dubbed 'BIM', aims to sign up five million user over the next five years. It enables cash transfers between phones for a 15 cent fee and is designed to work on the cheapest mobile handsets.

The project is driven by the The Association of Banks (Asbanc) and has been on the drawing board for many years. Future plans include the extension of the system to offer loans and other basic banking services to users. (Source date: 17 February 2016)