RETAIL BANKER INTERNATIONAL

February 2017 Issue 734

www.retailbankerinternational.com

HONING IN ON MONEY LAUNDERING IN LATVIA

- TECHNOLOGY: E-Wallets in Asia
- ANALYSIS: European Banking
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Starling's flying PR coup

Well done to UK digital start-up Starling Bank for capturing some prize PR just prior to the Christmas break with news that it was investigating the possibility of delivering customers' debit cards via drones.

If any other bank has explored the drones option, the news has passed me by.

I would however take issue with the Starling claim that drones delivery would enable it to deliver debit cards 'in record time'.

So I suspect might Metro Bank and a few others who have opted for the rather simpler (and cheaper) option of issuing debit cards in-branch. Instant issuance of debit cards in-branch is not rocket science or new.

Nor does it require trial flights or the cooperation of the Civil Aviation Authority.

Just how well Starling, Tandem, Monzo et al fare as they ramp up their operations will be one of the most interesting aspects of UK retail banking in 2017.

The New Year kicked off with news that Tandem had secured an investment of up to £35m ($42m) from UK retailer House of Fraser. Interesting, but not earth-shattering and one might venture to suggest that rival UK start-up Atom will gain more sector expertise from BBVA who invested a similar sum in it over a year ago.

BBVA is among the more dynamic and innovative lenders; by contrast, House of Fraser has posted annual losses in each of the past five years.

Outside the UK, of the start-up breed Air Bank in the Czech Republic continues to catch the eye.

Launched as recently as November 2011, it has already captured 500,000 retail banking customers. It is on target to reach its target of one million customers by 2021. Unlike the UK neo-banks, it has a modest branch network and is aiming to hit 35 outlets in the next five years.

Air Bank is also planning to treble its current 120-strong ATM network to more than 300 by the end of 2017.

Its marketing brief is based on a simple belief: 'Customers can like a bank' in what appears a blatant steal from Metro Bank's Love Your Bank creed.

Again, like Metro Bank, Air Bank has been hiring many of its staff from outwith the banking sector.

With a current market share by total assets of only around 2%, Air Bank will not cause too many sleepless nights just yet at the established players such as CSOB (17%) CS (16%) and KB (15%) but it is one to watch.

An interesting year ahead

The New Year kicked off with the welcome news that the UK government is no longer the largest shareholder in Lloyds Bank: its stake is now to below 6% and just behind the stake held by asset manager BlackRock.

It really will be a happy New Year when the UK government stake of over 70% in RBS reduces significantly.

Perhaps this is the year that the Prudential Regulation Authority will finally take action to kick off an independent review into the embarrassing and lengthy mess that is RBS' failure to dispose of Williams & Glyn and its 300 branches.

This sage dates back to 2009 – not a misprint – 2009 – when a senior RBS executive told me he thought the sale could be achieved in about a year. Tempting as it would be to name and shame, I will resist.

It was 2012 that Santander walked away from a £1.6bn deal to acquire Williams & Glyn over IT concerns.

Alarm bells ought to have been ringing at that time given Santander's stellar IT record following acquisitions of this type.

In the intervening four years, RBS has wasted over £1bn in trying and failing to create a standalone platform for W&G.

One of the issues has apparently been the handful of NatWest branded branches – only six in total - located in Scotland that operate on a different platform.

Quite why the six branches have not been closed and customers encouraged to switch their accounts to another bank in the past few years is a mystery.

Last time I checked, cities such as Glasgow, Edinburgh and Aberdeen where the branches are situated, have plenty of banking alternatives to NatWest.

Douglas Blakey
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Scandinavia strong, Italian woes and Barclays one to watch for 2017

Despite HSBC and Santander topping the rankings of Europe's largest banks by market capitalisation, they are still yet to match the their pre-crisis levels. Mixed messages characterised the retail banking sector in 2016, as share prices rose but performance failed to match historic highs. **Douglas Blakey** writes

All in all, 2016 proved to be a mixed year for the retail banking sector. At the top of the pile, HSBC and Santander – the two largest European-headquartered banks – both enjoyed share price rises of almost 25%.

Before they get too carried away, their respective market capitalisations of $162bn and $76bn today compare with over $200bn and $100bn in 2007, just ahead of the 2008–2009 financial crisis.

Of Europe's largest banks, UniCredit took the biggest hit in 2016, its share price down 44%, leaving the bank with a market cap of only $18bn.

A little over eight years ago, UniCredit regularly featured in any ranking of the world's largest 20 banks by market cap with a value of circa $80bn. Today it is does not even feature in Europe's top 20.

Nor does Deutsche Bank – now Europe's 21st-largest bank by market cap.

RBS – down by 24% for 2016 – now has a market cap of just $33bn; whereas before the financial crisis, it was the fifth-largest bank in the world by the same measure and in 2005 was worth over $100bn sitting behind only Citi, Bank of America, HSBC, and Chase.

The three largest quoted French banks all posted double-digit increases in 2016, as did the leading banks in Scandinavia, a demonstration of the region's strength.

By contrast, UBS and Credit Suisse have both had a difficult year.

Although Standard Chartered CEO Bill Withers described third quarter results as unacceptable, its share price is up by almost a quarter this year.

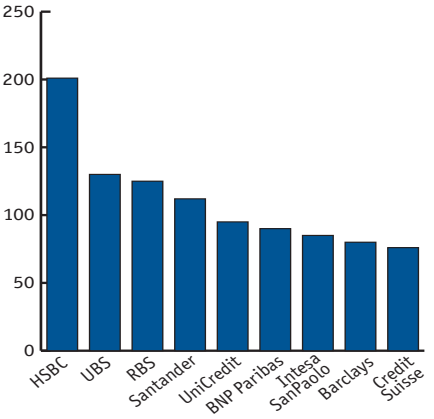
Barclays will be one to watch in 2017; its share price is flat for the year but in 2016 it undertook much of the heavy lifting and strategically exited or near-exited markets considered non-core. ■

EUROPE'S 30 LARGEST BANKS BY MARKET CAPITALISATION, 2016

	Market cap ($bn)	Share price YTD 1 Jan to 19 Dec 2016
HSBC	162.5	22.9
Santander	76.1	23.6
BNP Paribas	75.6	20.4
UBS	61.7	-15.3
Sberbank	58.4	96.5
ING	56.8	7.1
Lloyds	56.6	-11.1
Barclays	47.3	1.3
BBVA	44.8	-3.7
Nordea	44.4	10.3
Intesa SanPaolo	42.3	-19.1
Société Générale	39.5	12.5
Crédit Agricole	34.9	11.3
Royal Bank of Scotland	33.4	-24.4
Credit Suisse	32.1	-26.2
Danske Bank	29.5	17.5
Standard Chartered	27.9	24.3
Swedbank	27.2	22.4
Svenska Handelsbanken	27.1	22.6
KBC	26.4	5.6
Deutsche Bank	25.7	-18.3
DNB	24.4	20.5
SEB	23.1	12.5
ABN Amro	20.5	1.4
UniCredit	18.3	-44.2
VTB	15.3	10.9
Allied Irish Banks	14.2	-26.4
Erste	12.8	-1
Bankia	12.1	-7.5
Commerzbank	10.1	-20.8

Source: RBI

EUROPE'S LARGEST BANKS BY MARKET CAPITALISATION, Q3 2007 ($BN)



Source: RBI

Two reports and one directive to disrupt 2017

It was an unpredictable and eventful year, but what will be 2016's main legacy in terms of banking? **Liam Lannon**, payments transformation consultant at Sopra Steria, takes a closer look at the most disruptive regulations of 2016 and explores how they will challenge the retail banking landscape in 2017

Tumultuous, momentous and unrestrained in its unpredictability, 2016 will certainly be a year to remember. From a regulatory perspective, there were three clear moments which will stay with us into the new year: the second Payments Services Directive (PSD2), the Open Banking Working Group report, and the Competition and Market Authority (CMA)'s investigation into retail banking.

Like them or not, these are the 2016 events which will shape much of what happens in 2017 and beyond for retail banks.

PSD2

The first event actually happened in late 2015, when PSD2 was published in the *Official Journal of the European Union* – but the machinations of the European Commission are such that the directive's 'entry into force' occurred on 12 January 2016. To complicate things further, EU member states then have two years to transpose the directive into their own national laws.

Consequently, PSD2 actually comes into effect on 12 January 2018, and all states must therefore follow its rules from 13 January 2018. This means that banks have one year left to get ready and allow access to their customer account information to third parties via open application programming interfaces (APIs).

Open Banking Working Group Report

The second event was the publication of the Open Banking Working Group's report on 8 February 2016, which established the framework for an Open Banking Standard.

This aims to improve customer choice, while stimulating competition and innovation. The report says implementing the framework will make it possible for banking data to be shared and used securely, and adds that the framework could accelerate the implementation of new EU regulations on banking data.

The Working Group recommends that open APIs should be developed to allow both open data – such as information about banks' products and services – and shared data, including bank transaction data, to be exchanged between individuals, businesses and third parties.


Liam Lannon, Sopra Steria

CMA report

The third event – which gave added impetus to the Open Banking Standard – was the release of the Competition and Market Authority's report on its investigation into the retail banking market.

In the report, the CMA found that the larger UK banks did not have to compete hard enough for customers' business, making it difficult for the smaller, new entrants to grow.

To combat this, the CMA introduced a package of reforms, the most important of which required the larger banks in the UK and Northern Ireland to adopt an open API standard to provide access to 'open data' by March 2017, and to ensure that all aspects of an open banking standard for the sharing of transaction data were in place by early 2018. The CMA is prepared to impose fines and other penalties if these reforms are not implemented in a timely manner.

High impact

So what does this mean for 2017? The answer can be summarised by one word: open. By opening up access to a set of services through APIs, banks will need to have the systems in place to govern, manage and maintain their customer data, as well as having to manage and maintain the open APIs which they provide at no cost to the market. For established banks, there is an opportunity to get access to other customer information previously unavailable to them.

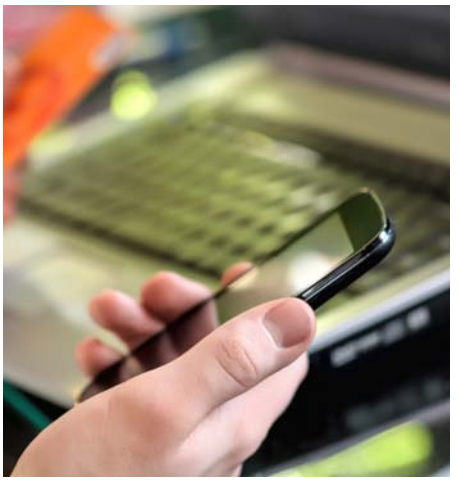
At the same time, however, there is a risk they will lose out to challenger banks which can select the best data to benefit, improve and transform their service offerings – data will be in the hands of not only the well-known new banks like Monzo or Atom Bank, but also technology companies such as Google, Facebook and Amazon, which could use it to branch into retail banking. As Bill Gates famously said: "We need banking, but we don't need banks anymore."

The key takeaway is not to panic but to assess how these pieces of regulation can benefit providers.

While many institutions will be tempted to see these events solely as a compliance piece – and therefore implement minimal compliance – they have the potential to be much more. These regulatory hurdles actually provide new opportunities for banks to become more innovative and open.

If banks can tap into this new, open marketplace quickly, they could reap huge rewards. In short, 2017 could be the year that established banks reimagine their role in the market – or the year that challengers become the new face of banking.

If there's one thing we've learnt from 2016, it's never say never. ■



BankMobile to undergo major enhancements during 2017

A lot has happened at BankMobile since *Retail Banker International* reported on the US digital-only bank a year ago. **Robin Arnfield** talks to Dan Armstrong, BankMobile's MD and chief digital officer, about the changes that have already taken effect, and what we can look forward to in 2017

"There's a lot that's changed with BankMobile," Dan Armstrong tells *RBI*. "We've acquired a student refund disbursement business, which is generating hundreds of thousands of new chequeing accounts annually.

"We're also relaunching our digital platforms in early 2017, and introducing a white-label banking platform for major retailers and other firms to sell branded chequeing and savings accounts. Our first major white-label customer launches early in 2017. Plus we're working on spinning off BankMobile into a separate chartered bank in 2017."

BankMobile describes itself as a fintech with a banking charter. The apps and middleware for its new digital platforms were developed by the BankMobile Labs innovation centre, and replace software from an external supplier.

"Unlike other digital-only US banks, we're a full-service bank offering demand deposit accounts with cheque-books, savings accounts and lines of credit, and we will be introducing credit cards in the first quarter of 2017," says Armstrong.

"BankMobile has no fees and pays interest at 25 basis points above the top four US banks. We offer fee-free access to the 55,000 ATMs in the Star Network, and, if customers deposit over $500 a month into their BankMobile account, they don't pay fees to use any US ATM," Armstrong adds.

BankMobile offers photo enrol – enabling a new customer to take a picture of their driver's licence and have their information automatically loaded into the account application. It also offers customers access to a personal banking team to help with tasks such as improving their credit score.

Originally, BankMobile targeted millennials, but has since found that it attracts consumers from older segments.

"We are finding that digital technology-first people cover all sorts of different age groups," explains Armstrong.

"We have a lot of older customers as well as underbanked people such as seasonal and temporary workers. BankMobile is a lot less millennial-focused than we had envisaged and as our original adverts suggested."

Acquisition

In June 2016, Customers Bank completed the acquisition of New Haven, Connecticut-based Higher One's student chequeing account and refund management disbursement businesses.

Higher One serves around 800 campuses across the US, providing them with a technology platform for disbursing financial aid through deposit accounts opened at partner banks.

Customers Bank merged Higher One's refund management disbursement business – renamed BankMobile Refund Management Service – and student current accounts with BankMobile.

"Our strategy with BankMobile Vibe, our student chequeing accounts, is about customers for life. When they graduate, student customers can upgrade into a BankMobile Bold account which offers savings products and loans," says Armstrong.

Market research conducted by BankMobile with its student customers found that a key issue for students is access to credit.

"So we are developing a capability to look at BankMobile Vibe customers' deposits and debit card behaviour while they are students over several years," says Armstrong.

"Then, once the students graduate, if they don't have a credit history, we will offer them credit based on their current account behaviour."

BankMobile 2.0

BankMobile's relaunched banking platform and app, BankMobile 2.0, will have extra features and a more responsive user experience, based on technology developed by BankMobile Labs.

"We will be offering a number of product enhancements," Armstrong says, "including a simplified line of credit and overdraft regime, and a higher level of personal financial management categorisation.

"Our new line of credit product will be similar to what we have now, but will offer non-variable pricing."

Armstrong says BankMobile is working on the third quarter 2017 release of a feature offering management for family accounts.

"This means individual family members can be given a debit card and demand deposit account, as well as accounts for small business people and entrepreneurs," he says.

White-labelled platform

BankMobile is actively seeking white-label partners as well as licensees for its API.

"We've built our new platform not just for BankMobile but also for Customers Bank, which will be moving its digital customers onto our core banking system in mid-2017, and for our student customers, who are currently on a separate core banking system," says Armstrong.

"So we decided to offer a white-labelled banking product set in the market, and have signed up a major US retail brand with 4,000 stores to resell our account under its own brand name."

BankMobile developed four programmes:

- BankMobile-branded co-branded apps
- Partner-branded apps
- Partner-branded app development
- API banking

Analyst comment

"While I applaud BankMobile's efforts in converting student refund disbursement customers into chequeing account customers, it will be very difficult for the bank to take college-age customers and grow and change with them over the next 10-20 years," says Ron Shevlin, director of research at US-based Cornerstone Advisors.

"Historically, no bank has ever been able to do that, but the reality is that college students' banking needs are more homogeneous than that of the adult population."

"I'm not seeing where the retailer opportunity is for BankMobile. A number of large US merchants are taking their cue from Starbucks and offer apps that let customers load funds for use in store.

"Why would a retailer want or need to offer a chequeing account with all the service and regulatory headaches that come with it? Because BankMobile will handle all that for them? I'm sceptical. I doubt that many retailers will see owning the chequeing account relationship as key to driving sales." ■

Risk and reputation: Latvia tackles money laundering

Eastern Europe is regularly regarded as a hub for money-laundering activity, with scandal after scandal revealing more money pipelined through the region. However, certain players are trying to combat this; Latvia-based Norvik Bank, in collaboration with FICO, is one of those. **Patrick Brusnahan** investigates

Latvian banks have never been too far away from a money-laundering scandal. Latvia has been involved in a number of high-profile scandals, including the Sergei Magnitsky case, possibly the largest tax fraud case in Russian history, worth $230m, and the Russian Laundromat scheme which laundered a minimum of $20bn.

In June 2016, documents were leaked to the Organised Crime and Corruption Reporting Project (OCCRP) showing Latvian banks actually offering instructions to clients on how to use fake offshore companies to launder money or evade taxes.

With a reputation such as this, is there any way for Latvian banks to gain a clean image?

Fighting money laundering

Norvik Bank, founded in 1992 and one of the oldest commercial banks in Latvia, has teamed up with FICO to develop anti-money laundering (AML) solutions, particularly FICO TONBELLER, which provides greater control over transaction reviews.

Oliver Bramwell, chairman of the board at Norvik Bank, tells *RBI*: "If you look back over the last 10-15 years, there have been quite a lot of negative reputational issues regarding Latvia as a money laundering centre for Eastern Europe.

"Obviously, we have close ties with Russia and Ukraine; this has been a major issue for the country.

"Based on the fact that Latvia wanted to become a member of the Organisation for Economic Co-operation and Development (OECD), and with a general drive to clean up the banking sector with regards to AML issues, the whole state was driving to have much stricter regulation. This was advised by the OECD and the World Bank."

The country as a whole has been pushing to limit money laundering and improve its reputation.

"At the start of this year we saw a significant change in regulation which made Latvia's banking system one of, if not the strictest, AML enforcers in the region," Bramwell explains.

"Historically, the AML approach has been a risk-based one, according to the requirements of leading global organisations. The approach is now a smart risk-based approach.

One of the key requirements is to establish a risk-scoring system which is now giving a much more detailed analysis and evaluation of the risk that each customer and their behaviour brings."

Risky business

When evaluating customers, a lot needs to be considered to determine their risk factor. What makes a customer a risky proposition?

"There's a mixture of factors," Bramwell suggests.

"Where do the beneficiaries come from? What are they declaring when they come into the organisation? And what are you seeing based on their transactional behaviour? This forms the initial risk scoring, similar to what you would see in the UK or the US.

"Once they've had their initial scoring and we've established their risk ranking, the key is then to monitor that on a daily basis to ensure that the score is not drifting too far from what you estimated it to be.

"This can lead to the basic score changing, which leads to multiple scenarios that require the know-your-customer team to work with the client to discuss whether this is a change in business behaviour or something suspicious that could lead to an AML report," Bramwell explains.

"It's not a radical change to a risk-based approach, but it's a little more scientific. It's going to be system-wide and all banks are becoming unilateral in their approaches. We're unifying the approach so that anybody who wants to run money through the country will not have an access point.

"At the same time, there are a number of additional requirements regarding documentation that the regulator is requiring to see in advance of account opening. The practices within the country are that, despite being a European country, we have to meet American sanctions for payments. Basically, it becomes a lot smarter."

While cracking down on fraud is to be lauded, adding more regulation is seen as a slightly risky move by some. A cleaner, more honest sector could even put some people off.

Bramwell concludes: "If we're looking at key metrics, it would be not to kill the business.

"The non-resident side of the business is very significant, and is in the region of 70% of our entire business. If we're employing a strict system, it may cause a commotion, so we need to implement it smoothly.

"For example, every non-resident client is now high-risk, so it is about grading them and while that's going mean more work, I'm hoping there's no negative impact from the implementation." ■

Can open banking inspire the loyalty that banks crave?

Customer retention is often cited as banks' top priority, but how to achieve this is slightly harder to lock down. Many methods have been pitched, but none seem to be the solution. However, as open banking becomes more prevalent in the industry, could that be the answer? Patrick Brusnahan reports

The banking sector, it would appear, is beginning to give open banking a chance.

According to research from banking software vendor Temenos in its *Open for Business* report, the industry now accepts open banking more as an opportunity than as a threat.

In addition, there are fewer concerns regarding cost or technology constraints.

Some 69% of senior bank respondents said they saw open banking as more of an opportunity than a threat, 17 percentage points higher than 2015, while 51% considered building an open banking platform as a higher priority, as compared to 30% in 2015.

Only 29% thought they could not exploit open banking due to technology or cost restraints, compared to over half of respondents the year before.

Embracing open banking has likely been driven by a combination of regulatory and market pressures. PSD2 includes an Access to Accounts provision that requires banks, when asked by customers, to provide third parties access to their data.

Banks are also finding that open banking and partnership with the fintech community is necessary to remain relevant in today's market.

According to the *World Fintech Report 2017* from Capgemini and LinkedIn, in collaboration with Efma, 76.7% of financial services executives agreed that fintechs provide partnership opportunities while 60% are already looking to make these partnerships.

Customer retention and digital channels

Retaining customer loyalty remained a top concern for bankers in Temenos's latest widespread survey.

However, the number of respondents considering it to be the top priority dropped as banks began to put more emphasis on leveraging data and improving the customer experience to encourage loyalty.

Some 25% of banks stated that digital channels were their top investment priority. This is hardly surprising considering the shifts of many products and services onto online and mobile platforms.

However, alongside this is an increased focus on wholesale IT modernisation with 19% of respondents claiming that IT modernisation was their biggest concern.

The report states: "Frankly, there is little point in having state-of-the-art digital channels if the data and content being served up is neither relevant nor timely and if the underlying fulfilment mechanisms are not instant and frictionless: User experience cannot be meaningfully enhanced under these conditions."

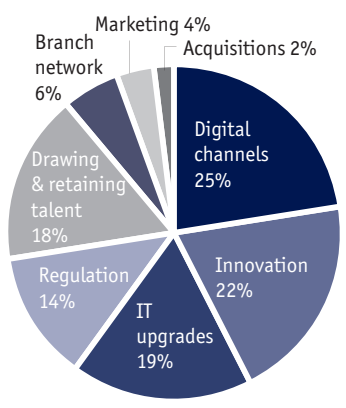
Retaining customers and their loyalty is crucial as competition in the sector increases. In recent years a clear consensus has emerged that the external threat from non-banking competitors such as Apple and Google was greater than those of other banks.

The threat from fintech companies was generally considered to be higher – 18% in 2016 as compared to 14% in 2015 – but the danger from technology platforms such as Google and Amazon decreased sharply from 27% in 2015 to 17% in 2016. This is attributed to the fact that current efforts, such as Apple Pay and Android Pay, have not received widespread success.

Incumbent banks, with big brands and scale, are still seen to be the biggest threat by banking professionals (22% stated this compared to 21% a year previously).

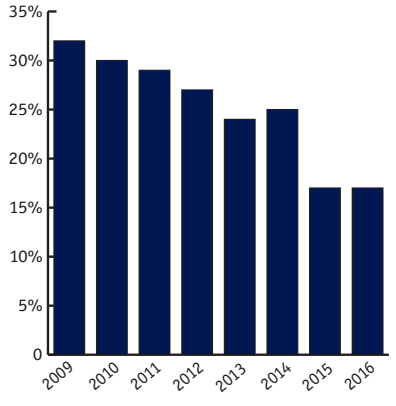
On the other hand, overseas banks are seen to be less of a threat – only 8% of respondents considered them to be the biggest threat – reflecting the mood of retrenchment and domestic focus as banks are hit by regulation and a greater pressure on profit margins. ■

■ TOP CORPORATE INVESTMENT PRIORITIES (%) 2016



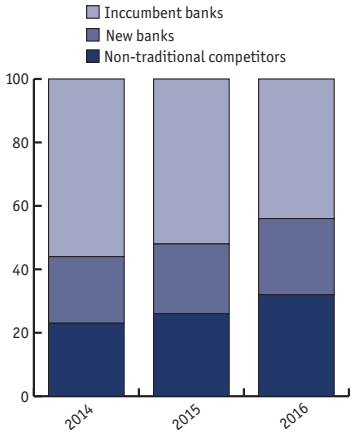
Source: Temenos

■ RESPONDENTS CITING TOUGHER REGUALTIONS AS TOP CORPORATE PRIORITY (%) 2009–2016



Source: Temenos

■ THE EVOLVING COMPETITIVE THREAT (%) 2014–2016



Source: Temenos

Bank on Security: Three strategies to stay ahead of cybercriminals

The banking and payments sectors need to do more to counter the various new strategies employed by cybercriminals, argues David Jones, global head of payments and banking at Irdeto. Not only are attitudes towards security lax, some of the industry's current strategies may even be aiding hackers

Payments on mobile devices, tablets and PCs are an everyday occurrence. Consumers do not think twice about making payments or conducting their banking activities online at any time, from any location.

According to the annual *Payments UK* report, last year the average adult made 648 payments – that is 54 payments a month. In addition, UK consumers spent £114bn ($138bn) online in 2015, and this trend shows no signs of slowing down.

With the rising number of digital payments, it is no surprise that the web applications consumers use to make these payments are a constant target of cybercriminals.

According to the latest *Verizon Data Breach Investigation Report* (DBIR), in 2015 40% of all data breaches were the result of web app attacks.

Each year billions are spent on trying to secure online banking and payments; however, cybercrime is still as frequent as ever. What is worse, banks and payment service providers (PSPs) may inadvertently be aiding hackers by overlooking these three common threats:

- **Web browsers** are inherently insecure. Whenever a browser communicates with a website, vulnerabilities specific to the browser can be exploited and the attacker can gain privileged access;

- **Web APIs** are not only a conduit for consumers to access devices and online services, they are an entry point for cybercriminals. API vulnerabilities are often the result of lax development practices and the increasing use of insecure, cloud-based tools and services. Hackers use algorithms to search web sites for exposed APIs. Then, through parameter tampering, spoofing or man-in-the-middle attacks, steal the keys to the app and gain access to data and company assets, and

- **Secure app development** is still a common problem, resulting in easy-to-avoid security vulnerabilities in most organisations. A laissez-faire attitude toward security seems pervasive in the development community with less than 10% of organisations ensuring that all critical apps are security reviewed. There is a subset of developers trained specifically in how to develop secure apps, but becoming one of them is not a priority for the vast majority of developers.

Simply put, organisations that do not safeguard themselves are easy targets. So what should banks and PSPs do to ensure customers are protected from cyberattacks?

Change the security mindset to mobile

For years, the security pitfalls that many banking and e-commerce applications face have been accepted as the cost of doing business on the internet. This is partly because there is a common mindset among security professionals that throwing hardware at a security problem is the best solution. But this mindset is not only behind the times, it is bad for business and for customers.

With mobile devices being used by consumers to shop and bank online, it has become an open and highly distributed world of e-commerce. Threats can originate from locations far removed from the data centre. Sensitive financial information is exposed to insecure environments located anywhere a consumer can take their tablet, smartphone or PC.

Unfortunately, implementing a hardware solution is simply not feasible in today's mobile world. However, good software security can not only be equally as secure as hardware, it can also be more cost-effective. By shifting the organisation's security mindset to mobile, banks and PSPs are able to respond and protect.

Think like a hacker

Hackers can exploit a weakness anywhere in a system, from the OS to a USB port. No matter how a hacker gets inside, applications are vulnerable. Imagine a scenario in which applications and their APIs are fail-safe.

Banks and PSPs can defend against the many different ways that hackers gain access to their infrastructure and are hardened against the hostility of their environment. They are also impervious to vulnerabilities created by insecure browsers, devices or poor development practices. Having a fail-safe app ensures that even if a hacker finds a back door, they will not be able to steal assets.

Get up to speed on whitebox cryptography

Today, cryptography protects virtually all electronic communication: from sending texts to making payments. But the current standard for cryptographic models is that the communication endpoints, the user's or merchant's devices, are presumed to be trustworthy. In other words, they are assumed to be used in a safe, attacker-free environment. But this is a totally unrealistic scenario for e-commerce.

E-commerce is most often conducted in a 'whitebox' environment, which means the endpoints are presumed to be insecure. Cryptography used in this sort of environment is called whitebox cryptography, and in its most effective implementations, the endpoint devices are presumed to have been compromised.

To achieve this level of protection, cryptography needs to be supported by technologies whose purpose is to ensure the authenticity of the JavaScript that is requesting communication. If the requesting code is authentic, the communication can be secure.

This approach protects web apps from data tampering, reverse engineering and man-in-the-middle attacks.

The payments and banking sector must look at ways to innovate services to keep pace with consumer demand while also addressing new strategies employed by cybercriminals.

While cash was still the most popular payment method in 2015, it is predicted that by 2025 cash payments will decrease to 27%. With this in mind, organisations must take the actions needed to protect their web apps.

By employing cybersecurity strategies, organisations are able to avoid commonly overlooked threats, allowing them to keep up with new banking trends to offer a safe and innovative customer experience. ■

From the overbanked and underbanked: There is an e-wallet for everyone

As technology opens new doors to more sophisticated services and offerings in the payments space, it is important to remain inclusive – especially in Asia, where there is a sizeable untapped market of consumers who do not have access to traditional financial services. **Xiou Ann Lim** takes a look at two e-wallets

Founders Jeremy Tan and Alex Kong are at the helm of two e-wallets with very different propositions, but there is one thing they agree on: Apple Pay, Android Pay and Samsung Pay are not e-wallets.

"It is a misconception that they are e-wallets – they are actually replacements for physical credit cards," says Kong, CEO of TNG Wallet.

"Even then, you still need to pull out a physical card for transactions above HK$1,000 ($130)," he reveals.

Tan, CEO of Singapore-based Liquid Pay, agrees: "They are digital card carriers."

Liquid Pay – which combines discounts with mobile payments – is more than just a card carrier. It selects the payment method that gives consumers the best returns by aggregating all the discounts from the different cards a user owns, and allowing merchants to run deals and promotions to users on the fly.

"This is our dynamic pricing engine: We combine the savings that users can get from their cards, programmes or membership providers and merchants – then we translate that into direct savings on the user's expenditure," Tan explains, adding that the e-wallet allows discounts to be displayed and deployed at the point of purchase.

What else qualifies as an e-wallet? According to Kong, an example of an e-wallet is Alipay, because it facilitates payments and money transfers to banks as well as to peers.

"TNG Wallet offers all those services and much more," says Kong.

He adds that TNG Wallet – which is headquartered in Hong Kong – is the only e-wallet that operates in 13 countries.

Kong says there are a few e-wallet functions that only TNG Wallet offers: "Apart from P2P as well as bank transfers (across 813 banks in 13 countries) – we are the only e-wallet that allows users to make cash withdrawals and that provides instant global remittance directly from the wallet."

He adds that TNG Wallet is also the only one to allow global bill payments and global SIM card top up.

But Kong points out that even more impressive than the strong network of banks TNG Wallet boasts is the around 190,000 cash pick-up points.


Alex Kong, TNG Wallet

"If you look at developing countries such as Indonesia, the Philippines, Vietnam, Myanmar and Thailand – up to 80% of the population do not have a bank account: they are the unbanked," he shares, pointing it out as an opportunity.

"They can collect cash from post offices, local pawn shops, convenience stores or the money changer," he explains.

Kong says this is why TNG Wallet is growing in popularity among foreign workers such as domestic helpers who send money back home to their families.

"We waive the transaction fee and offer the best exchange rate as well as instant cash withdrawal once the money is transferred," he explains.

The recipient will receive an SMS with a pick-up code, which is presented along with their identification at the point of cash collection.

Going cashless in Asia

E-wallets have been touted as one of the main drivers in helping countries go cashless. But is this possible in Asia?

Kong says one of the main stumbling blocks in going cashless for Hong Kong is culture. "It's not about the technology or infrastructure – people are just used to paying with cash."

This is in spite of the fact that 'e-wallets can now pretty much offer the services provided by traditional banks, but much more efficiently and at a lower cost'.

Meanwhile, Tan reveals that the retail sector in Singapore is seeing a growing usage of cards.

"Cash is still being used, but the numbers are not that high," he adds. He also says that


Jeremy Tan, Liquid Pay

payment for public transport is pretty much cashless, with the final frontier being hawker centres.

"There is a proliferation of ATMs in food courts, and banks have to bear the cost of refilling those ATMs."

If there is a cost attached to handling cash, why do banks still enable the use of cash through widespread distribution of ATMs?

"In delivering the most convenient services to consumers, we somehow reinforce their wants and certain behaviours – which makes it harder for us to change them."

Tan is of the opinion that when a cashless solution is introduced to hawker centres, it has to be convenient and easy to use.

"In small businesses such as hawker stalls, the owner may be multitasking as the chef and the cashier," he points out.

This means they will have to learn to use the terminal – to turn it on, replace the paper, etcetera – apart from operating the business.

"If we want to run the final mile in going cashless, we need to simplify the cashiering environment – and this is where we can say Liquid Pay is making a dent," he adds, explaining that the solution makes it convenient for merchants to accept payments.

"Consumers just need to have their QR code scanned and pay before the merchant receives notification of payment – the merchant doesn't have to take or swipe the card, tear off a slip of paper and tell customers where to sign – they can focus on doing other things as the payment is made," he says.

Tan believes there are three stumbling blocks to becoming truly cashless: "Some payment solutions are still too cumbersome, cash is convenient as ATMs are easily available, and we're not making it painful for people to use cash."

In fact, he points out that it is still convenient for people to use cash as they are being charged for using electronic payments.

But at the same time, Tan says change is starting to take place: "Banks are starting to realise the cost of handling cash and are looking to invest in non-cash alternatives."

He also highlights the Monetary Authority of Singapore's (MAS) initiatives to develop a National Payments Council and to consolidate all POS terminals so there is more integration.

"It's a step in the right direction – but we still have to use a terminal," he points out.

Next steps

The payments landscape in Asia is quickly becoming competitive as consumers start to develop higher expectations, so e-wallets such as TNG Wallet and Liquid Pay are constantly rolling out new offerings to grow their market share.

For example, Liquid Pay is at the stage of implementation – having just launched in Singapore in November – but is looking to hit the ground running in Malaysia, Indonesia and Thailand by the first quarter of 2017. Tan is already eyeing Hong Kong, India, Australia and New Zealand next.

"For the first two quarters, there will be a rapid growth spurt for us as we're deploying in various markets," Tan shares.

"Everything changes rapidly, so we're planning to move quickly as well by identifying markets that are most receptive and taking off there," he reveals.

Meanwhile, TNG Wallet – which is at a more mature stage since its launch in November 2015 – has been launching two to three new features every month, its next being Make Money, which allows users to earn money through gamification or completion of tasks such as participating in a survey.

"From October to November, our growth was 156%," Kong discloses. Looking at the current trajectory, he forecasts a 260% growth from November to December.

"This has exceeded our expectations and we are now facing a problem with capacity," he admits.

In order for TNG Wallet to offer remittance and bank transfer services, regulators require them to conduct full KYC checks.

"Our office in Hong Kong has 34 counters for this purpose – consumers who wish to sign up for our service have to present documents for verification," Kong explains.

"The cost of conducting these checks is also high – there's a cost incurred before they even use our services – and that is another challenge," he says, adding that conducting in-person KYC checks is also a monumental issue in geographically fragmented markets such as Indonesia.

But Kong remains positive, and believes that collaboration will help steer the use of e-wallets forward:.

"We've established the Global e-Wallet Alliance and we welcome any e-wallet providers to join this alliance to enable other e-wallets to work in foreign markets through partnerships with local providers." ■

Liquid Pay

What it does: Combines discounts with mobile payments by selecting the payment method that gives consumers the best returns. It aggregates discounts from the different cards a user owns and allows merchants to run deals and promotions to users on the fly.

Launched: November 2016

Founder: Jeremy Tan

Headquarters: Singapore

Markets: Singapore, Indonesia (2017), Malaysia (2017) and Thailand (2017)

TNG Wallet

What it does: Allows users to make P2P as well as bank transfers, bill payments and SIM card top-ups at 813 banks in 13 countries. It also allows recipients of money transfers to collect cash from over 190,000 cash pick-up points.

Launched: November 2015

Founder: Alex Kong

Headquarters: Hong Kong

Markets: Bangladesh, China, Hong Kong, India, Indonesia, Malaysia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand and Vietnam

Brexit chaos: Not just banks are affected

The vote in favour of Brexit last year was ill-conceived, argues **Tobias Schreyer,** co-founder and chief commercial officer at PPRO Group**.** It will have far-reaching consequences for London as a financial centre, and the impact will extend beyond the major banks to e-money providers, fintechs and consulting firms

Is this the end of London as a financial centre, or will British financial services providers actually retain free access to the EU? Whatever the case, it is by no means just banks which are affected by the chaos of Brexit.

Before the UK's Brexit referendum, only two things were clear: No-one knew what a Yes vote would mean for the country's exit from the EU, and, initially, nothing would change. Both things have come to pass, and now that the Brexit dust has settled, we find ourselves in the middle of Brexit chaos.

According to Article 50 of the Treaty on European Union, the withdrawal of a country from the EU must be negotiated within two years of its – in the UK's case, as yet unannounced – official application to leave.

To clarify: The EU and the UK have two years to define the terms of their future relationship, although it seems unlikely that anyone in Brussels or London seriously believes that a withdrawal on this scale can be pulled off in two years.

It is, however, precisely the results of these negotiations that will determine the actual effects of the Brexit, particularly on banks, fintech companies, cross-border e-commerce, and the payment industry.

London as a financial centre

Very few Britons in the financial industry were genuinely in favour of the UK's withdrawal from the EU – or, at least, very few would admit it publicly. Free access to the EU is too important. To pour oil on troubled waters, the controversial UK foreign secretary Boris Johnson was forced at the end of July to announce that financial services providers would, of course, be able to continue their business within the EU .

After Brexit, therefore, nothing would change for the financial industry. The minister practically guaranteed financial experts EU passporting rights (the free movement of services within the EU) as a fait accompli in the negotiations.

No-one really wants to rely on such statements; Johnson was probably just looking to gain some breathing space. In London, after all, there are around 700,000 financial sector jobs, and not only in traditional banks.

Although such banks are often cited in discussions of Brexit consequences, they are not the only players on London's considerable financial stage. While many non-European banks have their main headquarters in London and benefit from EU access, founding a new branch in the EU should be no problem for such industry giants. Each year, the UK exports around €24bn worth of financial services to other EU countries, and, in addition to banks, the financial industry comprises a large number of active fintech companies, consulting firms, and payment providers.

Tobias Schreyer, co-founder and chief commercial officer, PPRO Group

E-money providers are also affected

Three-quarters of emergent European e-money providers are headquartered in London and licensed as UK providers of financial services. One of the biggest advantages of European e-money services is that they can easily be provided across international borders. If UK financial licences become invalid within the EU, e-money providers will find themselves in a similar situation to banks.

Their only option will be to obtain a new licence within the EU, a process which involves additional regulatory requirements, duplicating infrastructure, and – most importantly – additional cost. This could put a considerable dampener on the development of e-money in Europe.

Despite this, e-money promises to be a key future issue for the financial industry as innovative companies seek out other options, including options outside the UK.

Ill-conceived

Brexit was ill-conceived in many respects, but the deed has been done and there is unlikely to be any going back now. PPRO Group is one of the companies which provide services under a licence from the FCA, the UK's financial regulatory body. Should this licence become invalid for the EU, we too will need a new one to continue to provide services to all our customers.

Before the referendum, therefore, the PPRO Group contacted regulatory authorities in various other EU countries to lay the groundwork for the worst-case scenario: the loss of EU passporting rights for UK financial services providers.

Unlike Johnson, we must assume that UK financial services providers will not retain passporting rights as part of the negotiations with the EU.

With Brexit, therefore, a considerable industry volume, including a great many experts, will disappear from the UK.

These experts include not only the emigrating banks, but also the innovative financial services providers who are now being forced to switch gears. ■

Polish innovator banks on a mobile future

Poland's mBank has been internationally recognised as one of the world's most innovative lenders. **Charles Wheeldon** talks to the bank's senior digital channels director, Piotr Hibner, about mBank's latest mobile banking application, its award-winning innovations, and its vision of a data-led future

Click to Call is mBank's innovative new mobile telephone banking service that connects customers with its Polish call centre.

mBank's senior director of digital channels Piotr Hibner tells *RBI* that the bank's strategy to develop its mobile banking offering does not just involve developing the app as a separate digital channel, but aims to act as a bridge between the digital and physical world.

Hibner says that with internet banking there is a distinct division between the physical world and the internet realm, but adds mobile banking is different because people often use their smartphones while they are actually in the physical world of stores, in the cinema, in the streets and so on.

Realising that it had not fully exploited its mobile offering led mBank to attempt to develop mobile banking multi-channel functionality, with Hibner describing the desire to make it 'our central channel gate', offering access to other channels, not only internet banking, but to its call centres and in-branch advisors.

So in the knowledge that it already had plenty of connections between its physical bank and its call centre, mBank set out to create a convenient feature for mobile customers, enabling them to access personal assistance when making financial decisions.

Click to Call, Hibner says, is particularly convenient because when users click for connection to the call centre, they do not need to remember their call centre passwords or customer numbers, or deal with any interactive voice response (IVR): They just log into the application, press a button, and are directly connected to an adviser.

"Just one click and all the customer's identification data goes into the background," Hibner sums up.

But what if someone else has got hold of your smartphone? If someone knows the PIN on your phone, Hibner responds, it is just like losing your credit card with its PIN or your wallet, pointing out that it is much safer from a banking point of view to lose your phone than your cards or wallet. Plus, customers can block their mobile banking app via their internet banking or a call centre, and the service has a default feature limiting amounts for non-authorised transactions.

Once connected to an adviser, the usual security questions are asked to ascertain identity should customers wish to transfer money into other accounts.

After just a few months Call to Click already accounts for almost 20% of incoming calls to the call centre, and Hibner points out that customers contact the centre on average maybe four or five times a year whereas use of the mobile banking app is closer to 250 times a year.

Hibner goes on to explain some of mBank's other recent innovations. Last year it introduced One Click Credit for customers short of money in their accounts. Each mBank customer is pre-scored with an approved credit limit and should they require money instantly they are able to log into the app and a credit application is presented to them on a single screen.

Entering the amount they need, customers are then offered the opportunity to select the number of monthly repayment instalments preferred, and the money is transferred into their accounts within 30 seconds. The limit of the personal loans via One Click Credit is PLN50,000 ($12,130) and Hibner says in the past month almost 20% of the bank's total cash loans, including branches and call centres, were sold via the mobile app.

Another innovation is mBank's travel insurance product. Again customers log in and go to a single screen, select either Poland,


Piotr Hibner, senior director of digital channels, mBank

Europe or worldwide travel, and the number of people travelling, hit the button and their cover is in place immediately. Global insurer Axa provides the product for mBank.

Hibner emphasises the convenience for customers out shopping who, on a whim, decide on a purchase which can be made there and then, or being in transit to the airport, or even inside it, can obtain their holiday insurance – all in under a minute.

He also stresses that in Poland all financial products can be purchased online from all the banks, with the exception of mortgages and life insurance which he describes as 'a little more complicated'.

Hibner is proud of the recognition that mBank has received in recent years for its products and services innovation, and for different parts of its business model and marketing. Its physical distribution network has also been recognised for its innovative design.

"mBank locates its branches in big shopping malls and shopping galleries," he says. "We don't have any doors with bodyguards or anything like that.

"I would say our branches are more akin to Zara or H&M. They are inviting to customers, with an open design and set among interesting shops. So we have won prizes for different sorts of innovations in very different areas. Our marketing platform is very advanced."

Real-time marketing and customer relationship marketing are particular areas for which mBank has been recognised.

Hibner says: "We don't, for example, spam our customers and we don't send our communications to the whole customer base. Take for example the travel insurance that I mentioned before. If we see that you have bought flight tickets using our credit card and if you are near the airport – because our mobile banking app uses geo-location – we will send you a personal notification saying: 'Hey, are you travelling? Maybe you need travel insurance.'

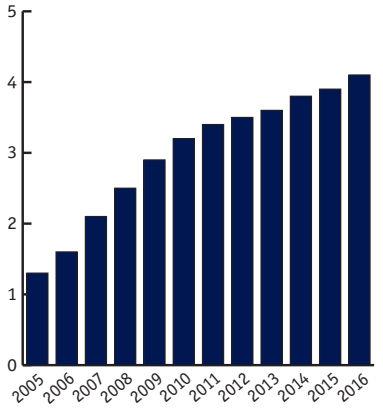
"It's very contextual. For every customer we can send communications based on his or her behaviour and context. And we have hundreds of different marketing campaigns tailored to customer behaviour in real time.

"If you are trying to use your credit card, but your credit card balance has ended so that you cannot use your card to pay, in real time we can offer you an increase in your credit card limit. We have hundreds of different campaigns every day. And for our energy and our approach we have received a number of international awards."

Hibner also talks of the recognition mBank has picked up for its internet banking platform, which he describes as very advanced, with personal finance management, peer-to-peer money transfers, as well as other features.

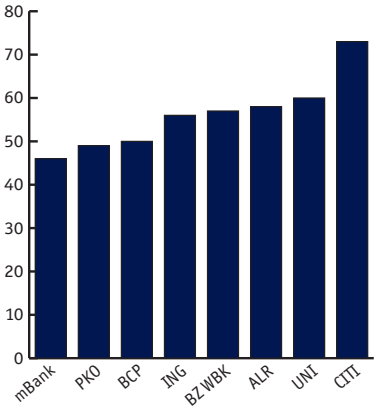
He is also particularly enthusiastic about the bank's automated statements offering. "For example if you pay monthly for your electricity, phone, or internet, you have to log in and arrange money transfers.

MBANK – TOTAL RETAIL CUSTOMERS 2005–2015 (MILLIONS)



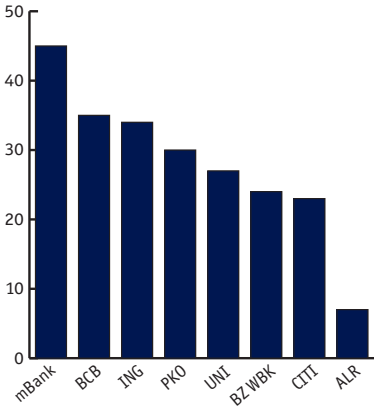
Source: mBank

LEADING POLAND BANK'S COST-INCOME RATIOS FY2015 (%)



Source: mBank

POLAND – PROFIT BEFORE TAX/REVENUE (%) 2015



Source: mBank

A decade of impressive growth

mBank continues to attract global recognition for its sales and channel innovation, writes **Douglas Blakey**

mBank continues to punch above its weight in a Polish market noted for an innovative retail banking sector.

A decade ago, mBank had little over one million customers; today that figure is well in excess of four million. This customer growth is no accident. Notable innovations have included mBank's deal with Polish telecommunications provider Orange Polska to create a new mobile retail bank in the second half of 2014.

Designed for smartphones and tablets users, the service provides customers with financial services under the Orange brand.

Then there is the mBank network of 'light branches', designed to fit into the fast-paced retail environment of shopping malls and complement the bank's larger, advice-based branches.

mBank's ambitious One Branch Network programme set (and achieved) ambitious KPIs: Square footage reduced by 33%, rent costs reduced by 19% and service charges were reduced by 12%. Such success in reducing costs is demonstrated in a sector-leading cost-income ratio of around 46%.

mBank has also enjoyed a sector-leading profit before tax as a percentage of revenue of 45%.

Product innovations deserving of international recognition have included the bank's mobile loan giving customers instant and simple access to additional cash via the bank's app in 30 seconds, launched in 2014.

m0kazje, Europe's first discount scheme with special offers sponsored by the bank's partners tailored on the basis of customers' profile and spending patterns has been another innovative winner.

Another sales success has been mBank's comprehensive insurance portfolio comprising more than 30 products offered via all channels, including internet, phone, mobile devices, video-calls and in outlets.

And it is mBank's digital sales excellence that continues to impress: It is way ahead of its Polish rivals with digital channel client acquisition of around 42%, against a sector average of about 14%.

In digital channel sales, mBank enjoys a rate of around 64%, with mBank's digital sales per 1,000 active customers in the region of three times the rate of the sector average. ■

"We take advantage of big data and try in advance to find repeating transactions on customer accounts and send personal messages.

"For example, today is the 16th, and usually on the 16th you pay for your electricity. Do you wish to pay it right now? So this is like a financial advisory service.

"We are finding customers' patterns and we try to offer them something like a reminder, so they don't have to keep in mind when to pay for this or for that."

This all may sound a little unusual for banking consumers in cultures such as the UK used to paying for regular items via standing orders and direct debits.

"Polish customers want to have the control," Hibner says. "Maybe the bill is too high. How would you know that, if it's paid automatically? And after it's been paid do you want all the bother if sending off a complaint?" he chuckles.

"So it's better for customers in Poland that they see their bills first and then log in and pay. We tried," he continues, "to adopt direct debit, but the adoption was very low, below 5% in fact.

"In our mobile banking app we have also implemented several pre-login scenarios. For example, to see your credit card limit or current account balance, you don't even have to log in. You just open the app and before you log in you can see the most important information that you need."

For those worried about security, this feature offers three possibilities. Customers can turn it off if they are worried about others seeing how much money they've got. Alternatively the feature can be set as a percentage.

Hibner continues: "So, for example, if for you, 100% is £10,000 ($12,150), and you have £2,000 in your account, the screen will simply say you have 20%. So it's like hidden information that only you can understand. Thirdly, you can set the information for the exact amount if you are not concerned that anyone else will have access to your phone."

Hibner goes on to outline mBank's several mobile payment offerings.

"You can use your phone to pay NFC payments, or Polish payment standards, or more country-specific payment standards.

"So we have a joint venture with nine larger Polish banks and all together we develop Polish payments standards. Every bank has the same standard, so the scale is meaningful, it's not that every bank is trying to do something independently. Together we have developed one common payment standard."

Looking forward, Hibner says mBank is assessing the functionality of the mobile banking channel because one of its strategic pillars is to review the functional gap between mobile banking and internet banking.

"Usually mobile banking is very simple. Customers look at the account balance or check their payment history or send a money transfer. But we've noticed that we have a lot of mobile-only customers, especially among the younger generation.

"They won't even possess computers soon, because the only device they use is their mobile telephone. So that's why we have to develop more features and functionality for the mobile banking application – so that our mobile-only customers can use the app as the only channel to manage their finances.

In conclusion, Hibner refers to the amount of information mBank has about its customers and how this is affecting the bank's current and future thinking.

"We have details of transactions, salaries, behaviour and so on, so our credit scoring is soundly based on customer behaviour.

"And for each customer we can say: 'Okay, you are trustworthy. We can give you PLN20,000 or PLN30,000, and be confident that we have made a sound commercial decision.'" ■

BIM mobile money scheme leads the way in interoperable payments

Peru's BIM is providing the international banking and payments industries with a reference model for how the various stakeholders in a mobile money ecosystem can collaborate to build a nationwide, interoperable infrastructure. **Robin Arnfield** takes a closer look at the platform's launch, strategy and ambitions

In February 2016, Peru's leading banks and mobile network operators launched the Billetera Móvilmobile wallet (BIM), a shared national digital financial services platform targeting the country's unbanked and underbanked consumers. Its goal is to sign up to half of Peru's 10 million unbanked persons by 2020.

BIM's users will be offered mobile digital financial services irrespective of who their bank or telco is. The services are being rolled out gradually, with person-to-person (P2P) transfers, deposits and withdrawals, and airtime top-ups launched first.

According to a GSM Association (GSMA) report *The Mobile Economy: Latin America and the Caribbean 2016*, over 70% of the Peruvian population is financially excluded. Jeffrey Bower, a former United Nations (UN) digital finance specialist with the Better Than Cash Alliance, says the reasons include high transaction costs, financial illiteracy, and a lack of accessibility in remote areas.

However, with over 40,000 banking agents and 10.6 million debit cards, Peru has a relatively well-developed formal financial sector, says Bower, who currently runs emerging markets payments consultancy Bower & Partners.

Another characteristic of Peru is a high degree of market concentration among a small number of banks. According to a March 2016 report by JP Morgan, Peru's top four banks – Banco de Crédito del Perú, BBVA Continental, Scotiabank and Interbank – held 87% of the country's total loans and 88% of the total deposits as of December 2015.

The Peruvian National Institute of Statistics estimates that of Peru's population of 30 million, 87% of homes have at least one mobile phone subscriber, indicating potential for financial inclusion via mobile devices.

BIM is operated by Pagos Digitales Peruanos (PDP), a private-sector company owned by Modelo Perú, a partnership between Peru's financial institutions including private-sector and state-owned banks, cajas (credit unions), microfinance institutions; licensed non-bank electronic money issuers; and the country's largest telcos.

Under Peru's Electronic Money Law, non-financial institutions are eligible to participate in financial services and offer banking products.

"Together these institutions have constructed a shared infrastructure for mobile payments, which forms the basis for competition on customer acquisition through products, all with a unifying goal of financial inclusion," says Bower.

"If successful, this will be the world's first attempt to build a fully interoperable national mobile payments system designed to promote financial inclusion."

PDP's stakeholders had the opportunity to learn from mobile money schemes implemented in other parts of the world before developing their own infrastructure. Many mobile money programmes struggle to reach scale because they are not attractive enough for people to switch away from cash.

"Part of the reason is that generally these programmes are operated by one entity, usually a single bank or a telecoms company," adds Bower.

"Often these solutions are closed-loop and work only for the organisation's own customers. When such limits are placed on how and where transactions can happen, there is limited incentive for people to change their behaviour, especially as cash is universally accepted."

Bower is a specialist in mobile money services and provided advice to Scotiabank in implementing Latin America and the Caribbean's first successful mobile payment service in Haiti in 2010 (TchoTcho Mobile).

He then developed mobile money programmes for Scotiabank in Mexico, Colombia and Peru. After leaving Scotiabank, Bower helped the Peruvian government design the partnerships and strategy behind Modelo Perú.

PDP operates the network and switch for BIM, handling the clearing of the transactions and settling via Peru's real-time gross settlement system (RTGS).

Asociación de Bancos del Perú's financial education institute holds a majority equity stake in PDP. Other investors include the UN Better than Cash Alliance and the Andean Development Corporation-Development Bank of Latin America.

Asociación de Bancos del Perú played a key role in establishing the Modelo Perú initiative. It invited technology companies to submit tenders to develop a national mobile payments switch that would work with all Peru's state-owned and private-sector financial institutions, microfinance providers, and telcos. The contract was won by Sweden's Ericsson in August 2014.

Progress report

According to Felipe Vasquez de Velasco, PDP's MD, as of December 2016 BIM had 280,000 customers.

"BIM is currently working with Movistar, Claro, and Entel and plans to add Bitel [owned by Vietnam's Viettel] during the first half of 2017," he says.

"Currently, 22 financial institutions are connected to BIM. Deposits are currently the number one transaction type and we expect to significantly increase top-ups in early 2017 and then focus on P2P transfers."

"I would have liked the service to have expanded more quickly," Bower tells *RBI*.

"But BIM's uptake has exceeded the initial expectations for the project in terms of the planned targets for the number of users. All financial institutions in Peru are pushing the service. While there are a number of issues preventing expansion, these are being dealt with and 2017 will be a year of growth."

De Velasco adds "Recently, we connected BIM to traditional chequeing accounts at one of Peru's main banks, so that money can be transferred from a bank account to BIM through the bank's mobile app and internet banking platform. Over the next few weeks,

a second bank will add this functionality, and the rest of the financial institutions connected to BIM will add it during 2017."

De Velasco says PDP is planning to extend BIM's coverage and user adoption by connecting the platform to the existing Peruvian point of sale (POS) networks and bill payment integrators, and by developing a new type of light agent network which will work only with cash-in-cash-out BIM transactions.

"The main focus right now is on building up BIM's customer base and improving its agent infrastructure," says Sonia Arenaza, regional lead for Latin America and the Caribbean at the Better Than Cash Alliance.

Currently, BIM is available only in an unstructured supplementary service data (USSD) version, a protocol used by GSM-based mobile phones for communicating with a service provider's computers.

"During 2017, BIM will become available as a smartphone app, but will continue to work on every type of phone using the USSD version," says de Velasco. "Future functionality will include cash-out at ATMs, purchases through POS networks, transfers from BIM to savings accounts, and loan payments."

"To expand and improve its agent network, BIM needs to add other types of functionality including business-to-business (B2B) transactions and merchant payments" adds Bower.

Pilot scheme

Three Peruvian consumer packaged goods manufacturers – beer producer Backus, Coca-Cola bottler Corporacion Lindley, and milk product producer Grupo Gloria – are participating in a multi-stakeholder supply chain digital money pilot linking BIM with 'mom'n'pop' stores in Lima.

According to Bower, if the B2B pilot is successful, the digital payment service for supply chains will be rolled out nationwide.

"The three companies are testing the digitisation of payment streams for their supply chains," says Bower.

"The cash that merchants put into their BIM account to pay for their Coca-Cola purchases can be used to pay for their milk and beer supplies."

Backus, Lindley and Gloria jointly represent 60–70% of the shopkeepers' basket of goods that consumers purchase.

"Their goal is to reduce the use of cash in a massive way, in every corner of Peru among the country's hundreds of thousands of shopkeepers, who have traditionally paid for their purchases from distributors in cash," Bower explains.

"The idea is that, if Peru's three major consumer product distributors agree on offering a single digital payment product, this will facilitate shopkeepers to switch from cash to mobile money. This pilot is one of the first multi-stakeholder mobile money projects in the world. Other countries are trying to implement similar initiatives with multiple consumer product distributors."

Moving from cash to digital supply-chain payments offers benefits in terms of increasing efficiencies in, and reducing the cost of, payments collection as well as eliminating the risk of theft and fraud.

Providing a digital supply-chain solution that works across all financial institutions and all telcos means that shopkeepers can become financially included, gaining access to formal credit, savings and insurance.

In 2012, Bower worked with Scotiabank and Backus to develop a B2B solution that would reduce the use of cash by allowing Peruvian shopkeepers to pay for goods using digital money.

"The solution worked, but constraints meant the product worked only with one distributor with one bank on one network, which inevitably limited use," says Bower.

"The interest was definitely there, but shopkeepers commented that it was hard to change payment behaviour for just one of their distributors. Distributors wanted the solution for all their clients, not just for some."

Digitising government payments

"When you have a platform that is collaboratively designed and that operates among all telcos, financial institutions and approved e-money issuers, this enables a government to actively transfer payment streams from cash to e-money via the platform," says Bower.

"The Peruvian government is pursuing a strategy of digitising payments at many different levels using BIM.

"Currently, the BIM development team is working with the government to decide which are the easiest payments to digitise. There is now the ability to pay small business taxes via a BIM account."

An October 2016 report by The Better than Cash Alliance, *Building from a Strong Foundation: A Path Forward for Digitizing Sub-national Government Payments in Peru*, recommended that BIM be extended to facilitate government-to-person (G2P) and P2G/B2G payments.

"Our research found that there is a potential to digitise approximately PEN33.33bn ($19bn) which will have cost efficiency benefits for the government and a positive impact on financial inclusion" says Arenaza.

According to the GSMA's *Mobile Economy: Latin America and the Caribbean 2016* report, in 2015 there were 37 live mobile money deployments across 17 Latin American and Caribbean markets, of which around half are led by mobile operators and the rest by banks and other financial services providers.

"The majority of countries [in Latin America] now have two or more live services, while several markets now have three," the report says.

"Three mobile money deployments in Latin America have more than 1m active customers, and there are now 17.3m registered mobile money accounts across the region."

Mobile money services are a powerful tool for deepening financial access, as half of adults in the region are underserved by formal financial services, the GSMA says.

Financial exclusion levels range from over 80% in Haiti and Nicaragua to less than 35% in Brazil, Jamaica and Costa Rica. Peru, at over 70% of adults without financial accounts, has the second-highest level of financial exclusion in the region, followed by Honduras, El Salvador, Colombia and Mexico with over 60%, and Argentina, the Dominican Republic and Venezuela with over 40%.

The GSMA claims that Honduras, Paraguay and El Salvador are in the top 20 global markets for mobile money penetration.

"In December 2015 alone, 40 million mobile money transactions were made across Latin America, including cash-in and cash-out," it says.

"Although far from the levels of uptake and usage we have seen in Sub-Saharan Africa, Latin America is notable for more diverse business models, a high degree of integration with the formal financial system, and a strong focus on building a mobile financial ecosystem from the start."

"At one end of the spectrum, the LAC region has business models similar to those in East Africa here a mobile operator assumes most of the functions in the value chain – for example, Tigo in Central and South America and Digicel in the Caribbean.

"At the other end of the spectrum, banks drive mobile money schemes and in some cases even acquire mobile virtual network operators in order to one day offer mobile financial services independently of mobile operators – for example, Bancolombia in Colombia," the GSMA says.

"New entities dedicated to mobile payments, including joint ventures between mobile operators and financial institutions or payment processing companies, are an alternative approach to mobile money in the region – for example, Transfer, a joint venture between América Móvil and Citibank's Banamex subsidiary in Mexico, and MFS, a joint venture between Telefónica and MasterCard in Brazil." ■

REGULATION

Italian government approves state bailout for Monte dei Paschi

The Italian government has approved a state bailout for the country's troubled lender, Monte dei Paschi di Siena (MPS).

The move comes after the Siena-based bank's failed attempt to raise €5bn ($5.2bn) from private investors.

The funds to bail out MPS will come from a €20bn bailout package recently approved by the government, which aims to help the country's ailing banking sector.

The lender, which emerged as the worst performer in the European stress tests this year, has so far raised only €2.5bn in private funds and requested a capital infusion from the state.

Under new EU rules, the bailout will involve a forced conversion of the bank's junior bonds into shares. ■

STRATEGY

Deutsche Bank names new global head of anti-financial crime and money laundering

Deutsche Bank has appointed Philippe Vollot as its new global head of anti-financial crime (AFC) and group money-laundering reporting officer, replacing Peter Hazlewood who is stepping down after just six months in the role.

Vollot will be based in Frankfurt and will remain as a member of the executive committee. He will report to Deutsche Bank chief regulatory officer and member of the management board Sylvie Matherat.

"Following the end of his contract, I would like to thank Peter Hazlewood for his service. We are currently in discussions with Peter regarding an advisory role," Matherat said.

Philippe spent over 13 years at the German bank, most recently as its global COO for regulation, compliance and AFC. His previous roles at the bank include global head of regulatory relationship and head of European compliance.

He also served at Barclays Capital and at the French Financial Markets Authority. ■

REGULATION

Morocco's central bank gives go-ahead to five Islamic banks

Bank Al Maghrib, Morocco's central bank, has approved five companies the legal right to establish Sharia-compliant banks in the country.

The approved institutions are Moroccan lenders Attijariwafa Bank, BMCE of Africa and Banque Centrale Populaire, along with two French lenders, Credit Agricole du Maroc and Credit Immobilier et Hotelier.

Four of the banks, excluding Attijariwafa, will form partnerships with financial providers in the Gulf. Attijariwafa is currently in talks to form a future partnership. The central bank also approved requests from Banque Marocaine du Commerce et de l'Industrie, Credit du Maroc and Société Générale to sell Islamic banking products.

"The launching of participative finance products in Morocco complements and expands the range of products offered by the domestic banking sector, and opens it up to new financing capacities," the central bank commented. ■

REGULATION

Deutsche Bank to pay $95m to resolve US tax evasion allegations

Deutsche Bank has agreed to pay $95m to settle a US government civil lawsuit which alleged that the bank used shell companies to dodge taxes.

The lawsuit was filed in 2014 after the bank's acquisition of a company in 1999 that held stock whose sale would lead to taxable gains of over $100m.

The government sought $190m, alleging that the German bank used shell companies to hide tens of millions of dollars in tax liabilities in 2000.

Manhattan US attorney Preet Bharara said: "Using a web of shell companies and a series of highly calculated transactions, Deutsche Bank sought to escape liability for tens of millions of dollars in taxes. This is tax dodging on a large scale.

"However, the government has made Deutsche Bank admit to its actions designed to avoid taxes and it is to pay $95m to the US in compensation for this conduct."

Deutsche Bank spokeswoman Amanda Williams said: "We are pleased to resolve this claim and put the events – which occurred more than 16 years ago – behind us."

The latest settlement by Deutsche Bank comes soon after its $7.2bn in principle settlement with the US Department of Justice over the issuance and underwriting of residential mortgage-backed securities. ■

DISTRIBUTION

UK digital bank Monese raises $10m to drive expansion in Europe

Monese, a British digital bank founded by Norris Koppel, has raised $10m in funding from several investors to expand its services across Europe.

The investors include Anthemis Exponential Ventures, Korea Investment Partners and STE Capital. The investment is Korea Investment Partners' first in a European startup.

Early backers SmartCap and Seecamp also invested in the startup. The latest funding brings the total amount raised by the digital bank to $15.8m.

Monese CEO Norris Koppel said: "The money raised will be key in helping us launch euro-denominated current accounts, direct debit and credit services."

Monese opened its doors in the UK in September 2015. The business has signed up over 40,000 customers from 179 countries since its launch, specifically serving immigrant and expatriate customers. ■

TECHNOLOGY

Chinese consortium launches $1.4bn fintech fund

A consortium of Chinese firms has launched a CNY10bn ($1.44bn) fintech fund to focus on mergers and acquisitions in the region's fintech space.

The new Asia FinTech Merger and Acquisition Fund of Funds will be led by Credit China FinTech Holdings, China Huarong International, Shanghai Xinhua Publishing Group and Jilin Province Investment Group.

Other partners of the new fund are the China Cultural Industry Association, New Times Trust, Shenzhen China Create Group, N-Securities, Beijing Yongyu Investment, Tianjing Borong and Jaunting Capital.

The fund will focus on mergers and acquisitions in big data, artificial intelligence and blockchain.

Credit China fintech executive director Sheng Jia said: "Using the fund partners' experiences and competitive advantages in brand recognition, industry resources and expertise, we aim to invest in innovative fintech enterprises to help them become industry leaders." ■

REGULATION

UK watchdog finds competition concerns with MasterCard's takeover of VocaLink

The UK Competition and Markets Authority (CMA) has found that MasterCard's planned £700m ($864m) acquisition of UK-based VocaLink may reduce competition in the supply of ATM network services in the country.

MasterCard and VocaLink offer services to the LINK ATM network, which represents nearly 70,000 cash machines across the UK and Europe.

VocaLink manages BACS, the UK's automated clearing house network that allows credit and debit payments between bank accounts. It also operates the country's Faster Payments Service (FPS) for real-time account-to-account payments via online systems, mobile devices, and phones.

The CMA said that the merger of MasterCard and VocaLink would put two of the country's three leading ATM network-services suppliers under one corporate roof, and will decrease the number of bidders limiting the ability of the Link scheme to achieve good value when tendering for an infrastructure provider.

The CMA acting CEO Andrea Coscelli said: "The Link ATM network provides an essential service for millions of customers, it is therefore of the upmost importance that Link has a broad choice of providers when it comes to supplying the necessary infrastructure so that it may take advantage of the opening up of payment systems to competition.

"These concerns warrant a closer investigation in the event that MasterCard cannot address them at this stage. We hope that a resolution can be found."

With respect to BACS and FPS, the competition watchdog has not found concerns in the provision of payment infrastructure services, as there are numerous credible alternatives to VocaLink and MasterCard.

The CMA said that companies can avoid the merger being referred for an in-depth investigation if they can provide a remedy to address the competition concerns identified.

It has given MasterCard and VocaLink until January 11 to propose a remedy to its concerns before launching a full investigation.

Commenting on decision of the CMA, MasterCard said: "We welcome today's decision by the CMA, regarding our planned acquisition of VocaLink. The thoroughness of the CMA's review reflects the significance of this deal and its potential for the industry as a whole." ■

TECHNOLOGY

FactSet snaps up Vermilion Software and Cymba Technologies

FactSet, a US-based provider of integrated financial information and analytical applications, has acquired Vermilion Software and Cymba Technologies.

FactSet acquired Vermilion for $67m and Cymba for $8m, both in cash.

FactSet CEO Phil Snow said: "Cymba and Vermilion are outstanding additions as FactSet strives to more holistically address the portfolio lifecycle through innovation and acquisition.

"Operating alone, each company has developed compelling functionality to meet the critical needs of the investment management community; combined with FactSet's commercial footprint, we believe we will better meet client needs going forward."

FactSet expects the acquisitions to break even to both adjusted and GAAP-diluted EPS by the fourth quarter of fiscal 2017. ■

STRATEGY

House of Fraser invests £35m in UK digital bank Tandem

UK-based department store chain House of Fraser has made a £35m ($43m) investment in Tandem, a digital-only UK retail bank founded by Ricky Knox and Matt Cooper in 2014.

Under the arrangement, Tandem will now offer online banking services to shoppers at the British retailer.

"House of Fraser is one of the great loved retail giants, with a customer-centric heritage that aligns closely with our mission and values. We're excited about the opportunity to help their loyal customers with their financial lives," Knox stated.

House of Fraser chairman Frank Slevin said: "House of Fraser is committed to a transformation of its business over the next five years and this new partnership is just one illustration of how we'll deliver a meaningfully different set of services to our customers."

Tandem secured a banking licence from the Bank of England in 2015, and currently offers savings accounts. The bank intends to launch current accounts and credit cards this year. The bank raised funding of over £30m in 2016, which includes an investment from eBay founder Pierre Omidvar. ■

PAYMENTS

Paytm receives regulatory approval to launch payments bank in India

Mobile payments firm Paytm has secured regulatory approval from the Reserve Bank of India (RBI) to establish a payments bank.

"This is our chance to build something that every Indian can be proud of. No other role or responsibility means as much to me as the privilege of building Paytm Payments Bank, and I intend to take a full-time executive role in the Bank," Paytm founder Vijay Shekhar Sharma said in a blog post.

Sharma was among the 11 entities who received in-principle approval in August 2015 to launch payment banks.

The other recipients were Airtel M Commerce Services, Aditya Birla Nuvo, Reliance Industries, Vodafone m-pesa, Tech Mahindra, Cholamandalam Distribution Services, Department of Posts, Fino PayTech, National Securities Depository, and Shri Dilip Shantilal Shanghvi.

Tech Mahindra, Cholamandalam Investment and Finance Company and a consortium of Dilip Shanghvi, IDFC Bank and Telenor Financial Services backed out of the plan.

In November 2016, Airtel launched payments bank pilot services in Rajasthan. In the following month, Paytm merged its digital wallet service with its upcoming payments bank.

Payment banks are permitted to take deposits, offer internet banking facilities support fund transfers, sell insurance and mutual funds, and issue ATM debit cards. However, they are barred from issuing credit cards and lending to customers. ■

STRATEGY

BNP Paribas names group head in Germany

BNP Paribas has appointed Lutz Diederichs as its group head in Germany and chair of the group management board.

Diederichs will replace Camille Fohl, who in March will take over as advisor to the BNP Paribas group executive committee in Paris. In the new role, Fohl will deliver advice on the development of business activities of the group in Europe.

Diederichs will officially assume his new role in March, and will report to BNP Paribas COO Philippe Bordenave.

He most recently worked at HypoVereinsbank, where he held several roles for over 25 years. Since 2009 he has been a member of the board of the HypoVereinsbank – UniCredit Munich. ■

MOBILE

ICICI Bank unveils Eazypay mobile payments app

Indian private sector lender ICICI Bank has introduced a mobile app to allow merchants, retailers and professionals to accept payments on mobile phones through various digital modes.

Consumers need to have a current account at ICICI Bank to use the Eazypay app, while non-customers can use the app after opening a current account with the bank.

Eazypay will enable customers to pay through Unified Payment Interface, credit or debit card, internet banking, and the bank's digital wallet, named Pockets.

ICICI Bank MD and CEO Chanda Kochhar said: "I believe this application will have broad base usage as it allows merchants to collect any amount digitally without any hassles of a daily or monthly limit on collection."

The app is currently available on Android smartphones, and will soon be available for smartphones on the iOS operating system. ■

M&A

OTP Bank to acquire Société Générale's Croatian unit

Hungary's OTP Bank has agreed to buy Splitska Banka (SGSB), the Croatian subsidiary of Société Générale, for an undisclosed sum.

Société Générale said its strategy for central and eastern Europe would be to focus on markets where it can be placed among the Tier one banks and contribute materially to regional returns.

"The combination of SGSB and group OTP bank operations in Croatia will enable the creation of a more significant-sized banking player in the country with a greater potential for development," Société Générale said.

The French banking group said the deal will reduce its fourth-quarter earnings by nearly €240m ($253m), and upon completion will boost its core equity tier 1 capital ratio by 8.5 basis points.

In a separate statement, OTP said the deal would increase its market share in Croatia to around 10%.

The transaction is anticipated to be wrapped up in mid-2017, and the integration process expected to be concluded by mid-2018. ■

DISTRIBUTION

Whitney Bank to buy nine branches from First NBC Bank

Whitney Bank, the banking unit of Hancock Holding Company, has agreed to acquire nine branches and $1.3bn in loans from First NBC Bank, a subsidiary of First NBC Bank Holding Company.

As part of the deal, Whitney will take over nearly $511m in transaction and savings deposits in the nine branches and $605m in Federal Home Loan Bank of Dallas (FHLB) borrowings.

The branches to be sold are located in New Orleans, Metairie, Terrytown, Amite, Slidell, Pearl River, and Houma.

Hancock Holding Company president and CEO John Hairston said: "The purchase of these assets and liabilities will strengthen our position in Greater New Orleans and we expect the transaction will add approximately $26m of incremental annual earnings once completed."

The transaction is expected to close in the first quarter of 2017, subject to regulatory approval. ■

SECURITY

Keystone Bank selects NetGuardians solution for online fraud prevention

Nigeria's Keystone Bank has chosen Swiss fintech firm NetGuardians to offer real-time protection against online banking fraud.

The bank will use NetGuardians' FraudGuardian solution that uses a patented big data model to assess behaviours across the bank system including e-banking, service channels, IT systems, and financial transactions.

The solution will be implemented by NetGuardians' local implementation partner: Inlaks Computers.

The technology vendor said that the move will allow the bank adhere to the Central Bank of Nigeria's new risk directive that requires financial providers to automatically report suspicious events to the Nigeria Inter-Bank Settlement System through an enterprise fraud management system.

NetGuardians said that its FraudGuardian solution is recommended by the central bank as the ideal solution for this purpose.

Keystone Bank CIO Femi Aderibigbe said: "The CBN recommendation naturally gave confidence in the NetGuardians solution.

"However, it was its innovative approach to fraud prevention and system features which convinced us that NetGuardians was the solution that would ensure our customers' protection from online fraudsters." ■

SECTOR: MOBILE

Indian government launches mobile payment app

Indian government has introduced a new mobile payment app, Bharat Interface for Money (BHIM), that will allow users to make transaction using an impression of their thumb.

Developed by the National Payments Council of India (NPCI), the Unified Payment Interface-based payment solution will facilitate retail banking operations.

Speaking on the sidelines of the DigiDhan Mela event in Delhi, Prime Minister Narendra Modi said the app will be common across all financial institutions, and users can transact funds without a credit or debit card, or mobile wallet.

The app, which can be used on both smartphone and feature phones without internet connectivity, will allow users to make transaction just using a phone number.

To make a purchase, customers enter their Aadhaar number and choose a bank on the vendors' smartphone. The transaction is confirmed using the customer's fingerprint.

If the merhant uses the BHIM app, customers can simply select the send money option on their app and type in the amount and the vendor's phone number. The app will also allow users to scan a QR code to make payment.

It is currently available on the Android operating system, and will soon be launched on iOS. ■

M&A

BBVA snaps up Mexican startup Openpay

Spanish banking group BBVA has acquired Mexican online payments start-up Openpay for an undisclosed sum.

Openpay supports e-commerce for large businesses and SMEs. The firm's real-time platform enables card, cash and loyalty-points payments and banks transfers in a single integration. The firm operates in Mexico through its own global network Paynet.

Openpay co-founders Roberto Bargagli, Eric Nunez and Heber Lazcano will continue to manage the company from offices in Queretaro.

BBVA head of customer solutions Derek White said: "This operation will allow us to remain at the cutting edge of payment systems. The operation will also bring numerous benefits for our customers."

Last year, the bank acquired a 29.5% stake in British mobile-only bank Atom, and San Francisco-based user experience and design agency Spring Studio. ■

M&A

Tisco to buy Standard Chartered's Thai retail banking business

Tisco Bank Public Company and All-Ways Company, subsidiaries of Tisco Financial Group, have agreed to acquire the retail banking operations of Standard Chartered Bank (Thai) Public Company (SCBT).

Tisco Bank will buy SCBT's personal lending, mortgage, retail banking, wealth management and individual deposits businesses, while All-Ways will acquire SCBT's credit card business.

As of 30 September 2016, the net asset value of the acquired operations was nearly THB5.5bn ($152.7m), which included total assets of THB41.6bn and total liabilities of THB36.1bn, Tisco said in a filing with the Thai stock exchange.

The transfer is expected to be concluded within 2017, subject to regulatory approval.

Standard Chartered Bank Thailand and Representative Offices CEO Plakorn Wanglee said: "While our retail banking business is of high quality, it has insufficient scale and it has become difficult to achieve the returns that we aspire for.

It is after careful consideration that we have agreed to transfer the retail banking business to Tisco." ■

SECURITY

Banks join forces to establish financial cybercrime-response team in Italy

The Bank of Italy, the Italian Banking Association and the ABI Lab Consortium have joined forces to establish a specialised computer emergency response team (CERT) to combat cyberthreats in the country's financial services industry.

The new team, Certfin, will operate in compliance with the principle of public-private sector cooperation, with the aim of countering cybercrime connected with the development of new technologies.

It will gather statistics, information and reports and evaluate the phenomena linked to cybersecurity.

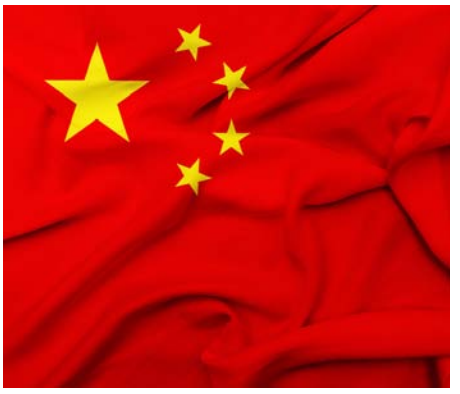
Participation in the new cyber-response team will be open to various banks, payment service providers, financial intermediaries, market infrastructure companies, IT and internet infrastructure providers, and insurance firms.

Certfin, which will also liaise with other organisations, will launch various services for financial institutions starting next January plans to roll out all services required by the international standards within two years.

A strategic committee chaired by the Bank of Italy and ABI will be responsible for strategic and managerial decisions at Certfin, while an operational unit managed by ABI Lab will coordinate the services. ■

M&A

Bank of China to sell majority stakes in Chiyu Banking to Xiamen International



Bank of China Hong Kong (BOCHK) has agreed to sell its 70.49% of stocks in wholly-owned subsidiary Chiyu Banking to Xiamen International Investment and the Committee of Jimei Schools for HK$7.685bn ($991m).

Chiyu Banking, which has been registered as the 39th licensed bank in Hong Kong since 1947, operates 24 branches in Hong Kong, one branch and two sub-branches in Xiamen and one branch in Fuzhou.

BOCHK said the proposed disposal, which is subject to the satisfaction of all the conditions precedent set out in agreement, may or may not proceed to completion.

BOCHK vice-chairman and CEO Yue Yi said: "The proposed disposal is a pivotal initiative in implementing Bank of China Group's strategy of driving global expansion and optimising overseas business.

"Given its strength, experience and reputation, XIL is an ideal buyer for Chiyu Bank. We believe XIL will be able to provide and excellent service to customers and has the ability to make agreeable arrangements for employees while ensuring the sustainable development of Chiyu Bank. ■

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Financial News Publishing Ltd, 2012
Registered in the UK No 6931627

Adjusting to life on the planet of the apps

With political uncertainty and slow economic growth, 2017 is set to be interesting. As financial services institutions continue to battle with regulatory requirements, the sector will embrace new technology to tackle the challenges, writes **Alex Kwiatkowski,** senior strategist, banking and digital channels at Misys

With Apple's App Store set to hit 284 billion downloads, generating over $100bn in revenue by 2020, and a growing realisation that strong digital foundations form an essential part of the financial services sector's future, winning in a digitalised economy has never been so important.

Just how will banks adjust to life on the 'planet of the apps' in 2017?

Back up: 2016

The main agents of change in 2016 remain relevant, and will continue to alter banking's composition during the coming 12 months.

The year witnessed the closer integration of physical and digital channels and the acceleration of digitalisation activities in both retail and corporate banking. We saw the increased use of mobility and the obstacles to cloud computing being progressively overcome.

In addition, 2016 ushered in the opening of previously closed banking platforms to third parties through platform-as-a-service (PaaS). This approach enables banks, fintechs and students to develop and deploy apps on trusted architecture. Driven by the app economy mindset, banks will benefit from an increase in innovation and reduction in costs.

The back end of 2016 also saw shoots of recognition around the importance of regulatory technology (regtech). Regtech is one to watch as progressive regimes recognise there is a role for them to play beyond ensuring compliance.

What can we expect from 2017?

- Preparations for PSD2 will hit top gear within progressive banks, allowing them to get into an advanced position to exploit a new app-driven era of openness in banking;
- PSD2's January 2018 implementation target could possibly change, but the potential rewards reaped by banks extend far beyond achieving regulatory compliance. Getting the preparations right in 2017 will separate the winners from the losers;
- Cloud adoption accelerates and PaaS allows competitors to reach new heights of differentiation;
- Obstacles to cloud computing have been steadily reducing in size as financial and operational benefits prove too attractive to ignore. But arguably PaaS represents the biggest opportunity, as it gives banks access to new app-driven capabilities;
- The extended development of new fintech- and regtech-specific legislation;
- Innovating to reduce complex, fragmented regulation is essential if wide-ranging industry improvements are to be made. Customers, regulators and investors will be the main beneficiaries;
- Turning the EU General Data Protection Regulation from legislative vision into operational reality is going to prove problematic and resource-intensive;
- The General Data Protection Regulation will make its presence felt during 2017, as banks grapple with the magnitude of the task ahead of the May 2018 deadline;
- Protect, prepare and predict' becomes a mantra as banks seek new ways to repel cybercriminals while simultaneously using analytics to get closer to customers;
- 'Protect' is as much about protecting customers from cyberattacks as it is about protecting previous investments in IT. 'Prepare' focuses on being ready for the future, while 'Predict' is all about getting smarter, faster and better via the use of advanced analytics;
- Opacity surrounding the Internet of Things (IoT) in retail banking reduces;
- Use cases for the IoT are going to be at in a nascent state of development in 2017. The fact that banks are interested in understanding what role – if any – the IoT will play in the future is encouraging;
- Foundations will be laid for cognitive technologies as part of the drive for operational excellence;
- Customer acceptance and the adoption of the type of 'voice banking' enabled by cognitive technologies will be modest in 2017, but it is important to install the rails upon which such services will run in the future;
- Digital payments are en vogue again, thanks to a combination of ecosystem activity and increased adoption among retailers and customers;
- Mobile commerce transactions will rise thanks to adoption and acceptance among retailers and users alike, combined with improved device sophistication and penetration, and
- President Trump repeals Dodd-Frank. Ok – this one is my wildcard! While there's little prospect of the new President actually ripping up all the new rules which were implemented to prevent a repeat of the banking crisis, modifications could conceivably make it onto the agenda.

This is by no means an exhaustive list, and if 2016 is anything to go by we can expect some curve balls along the way. Recent events beyond the walls of banking teach some valuable lessons and the financial services industry must be willing to expect the unexpected.

One thing is for certain: Banks will need to consider if they're ready for life on the planet of the apps, and identify how they are going to maximise the opportunity to monetise digitalisation activities.

Here's to 2017! ■

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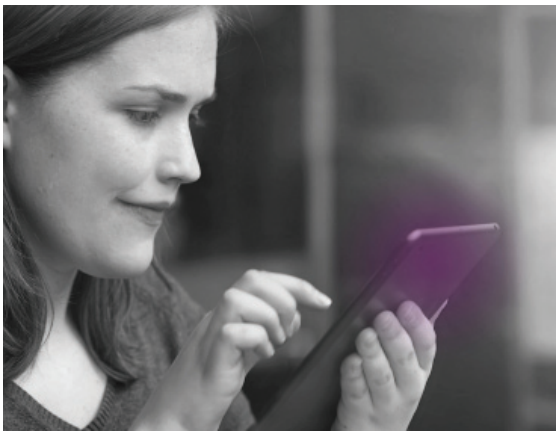

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