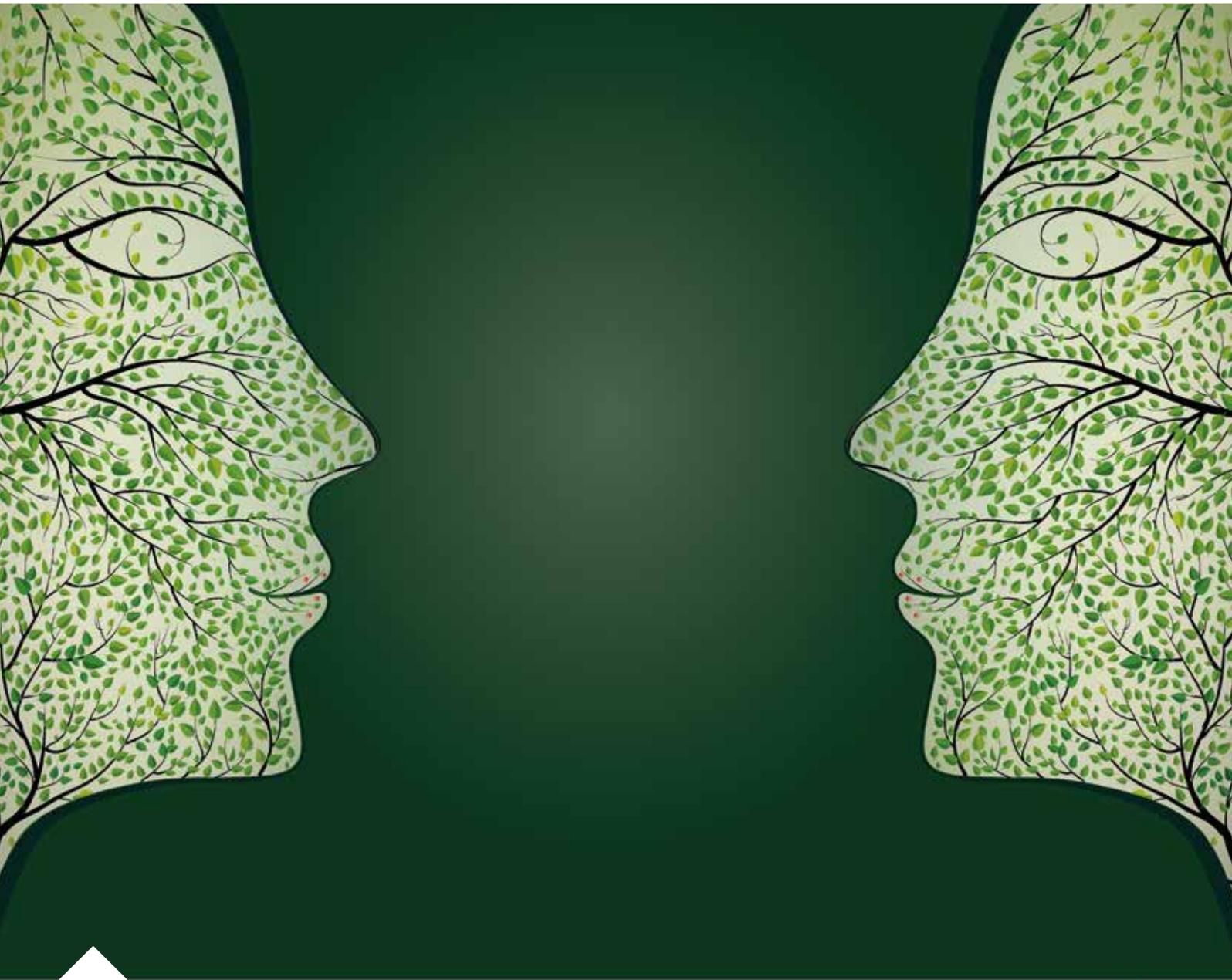


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## Editor's note

We are still early days into the year, but it has already brought us a number of high-profile takeovers in the financial services tech space across the globe.

In the US, mobile banking app developer Digiliti Money was acquired by another fintech vendor, Urban FT (see p6). No surprises here – Digiliti ran into major financial and organisational difficulties last year and has been in conversations with Urban FT about the sale for a while.

In the UK, risk management and regtech vendor Lombard Risk got taken over by Vermeg (see p14). Vermeg, which specialises in securities processing and fund administration tech, has valued Lombard Risk at £52 million.

Visa bought its long-standing partner Fraedom, a paytech firm that focuses on the corporate sector and originates from New Zealand (see p5). Visa did not disclose how much money it parted with. Fraedom's tech underlies Visa's IntelliLink Spend Management, a core platform for its commercial and SME clients.

Openlink Financial, a provider of trading and risk management tech, has been acquired by ION Investment Group (see p7). Is ION aiming for a clean sweep of the treasury management software market? It already owns most of the key providers in this space (the two

exceptions at present on the international scene are Calypso and Murex). I guess we'll never know – ION is notoriously reclusive when it comes to communication.

And, of course, there is an interesting move by Temenos to diversify its portfolio by buying trading platform developer Fidessa. The two parties have reached an agreement for an all-cash deal, valuing Fidessa at £1.4 billion (see p13). One may also recall the recent rumours of Temenos itself being an acquisition target, with Japan's SoftBank named as an interested party. This, however, was denied by the core banking system vendor.

So, who's next? **bt**

**Tanya Andreasyan**  
Editor-in-Chief  
*Banking Technology*

## Abcul searches for new CEO

The Association of British Credit Unions Limited (Abcul) is looking for a new leader as the incumbent chief executive of 20 years is leaving the company.

Lyonette will become new CEO of the National Pharmacy Association once he leaves Abcul in May this year.

Meanwhile, Abcul has kicked off the search for a replacement. The position comes with a circa £70,000 annual salary and is based at Abcul's head office in Manchester.

"While a significant function of the role is outward looking, it is important the successful candidate also understands the importance of being present and visible in the office," the company says.

The closing date for applications was 28 February 2018.

Under Lyonette's leadership, Abcul says it more than quadrupled its membership and its assets under management (AUM) grew by nearly 900%. Around 200 UK credit unions are Abcul members.

But Lyonette also presided over a far from successful project to modernise Abcul's technology and operations.

The project, known as Model Credit Union, was part of a broader Credit Union Expansion Project (CUEP), initiated by the UK government back in 2014.

The overall programme was valued at £38 million, with the technology portion believed to be around £8 million.

Abcul's dedicated subsidiary, Cornerstone Mutual Services, was carrying out the work. The plan was to bring together a range of facilities, including a new core banking system and a new mobile app – both provided by Fiserv – and migrate Abcul's members onto this new shared platform.

Around 35 credit unions signed for the new platform but just three managed to go live. The venture came to a grinding halt last year, as reported exclusively by *Banking Technology*.

The fate of Cornerstone is yet to be unveiled, with rumours on the market that it is being disbanded. Abcul told *Banking Technology* that Cornerstone is not being liquidated, but no further details are yet available.

Tanya Andreasyan

## Alipay crosses Finnish line for cashless payments

Ant Financial's mobile payment platform Alipay reveals that a group of Chinese travellers have concluded the first ever cashless journey to Finland, with all transactions made via their Alipay accounts.

From booking flights to making local retail purchases, the firm says Finland becomes the first country outside China where Alipay users can make all payments with their smartphones.

Zoe Cai, a "housewife" and "frequent overseas tourist" from Guangdong Province, says: "I didn't expect us to be able to use Alipay almost everywhere in Finland. I brought some cash with me, but the only place I got to use it was in a supermarket in Rovaniemi. At first, we were surprised when so many merchants accepted Alipay, but after this experience, we may be surprised if a merchant doesn't accept Alipay when we travel next time."

Alipay says it has also teamed up with Lähitaksi, a Finnish taxi company. It will be made available on all 1,250 Lähitaksi taxis in Helsinki and the city's surrounding towns before the Chinese Lunar New Year holidays later this month.

Since 2017, Alipay has also been made available at the Airport Taxi in Helsinki and in taxis and buses operated by local taxi company Santa Line across Finland's northernmost region, Lapland.

The group of eight Chinese tourists who visited Finland were selected from an online social media campaign initiated by Alipay at the end of 2017.

The grateful eight enjoyed a six-day trip, visiting the cities of Rovaniemi and Helsinki in mid-January.

Incidentally, Jack Ma's Alibaba Group will acquire a 33% equity interest in its affiliate Ant Financial as it looks to push deeper into the fintech world.

Antony Peyton

## New go-lives and clients for core banking tech vendor BML Istisharat

Lebanon-based BLC Bank has ousted the legacy Ambit Treasury Management (Quantum) system from FIS/Sungard in favour of BML Istisharat's ICBS.

BML already supplies its flagship ICBS solution for core banking operations at BLC Bank. Now, the system's treasury and capital markets modules support placements/deposits with correspondent banks, interbank transfers, fixed income (bonds and treasury bills), and Swift interface and integration with the main core system through web services at the bank.

Elsewhere, Liberty International Bank, a start-up venture of Société Générale in Abu Dhabi, has gone live on the ICBS core banking system.

Also, Bank of Jordan, a long-standing user of ICBS in Jordan and Syria, has selected the system for its newly established subsidiary in Bahrain.

Further afield, Peterhouse Securities in the UK, also opted for the ICBS core.

Meanwhile, BML is now venturing into Asia Pacific with its core banking platform – Malaysia-based Vastcomp has recently become its distributor in Malaysia, Indonesia, Vietnam, Brunei and Singapore.

BML currently has one customer in that region – Malaysia-based Bank Simpanan Nasional (BSN) – to *Banking Technology's* knowledge. The project dates back to 2011/2012, when BSN chose ICBS for a major core banking transformation project, to replace a number of legacy systems, including the ICBA solution from local developer Infopro.

The deal came through Heitech Padu, BML's distributor in Malaysia and Indonesia, and the project is expected to cost MYR 100 million (\$32 million).

BSN is a government-owned bank, with around 400 branches, 5,100 employees and almost ten million accounts.

Tanya Andreasyan

## Nxchange pioneers ABN Amro's blockchain tech for escrow accounts

ABN Amro Clearing Bank (AACB) has developed an alternative for escrow accounts – based on blockchain technology.

The solution was developed in consultation with an Amsterdam-based start-up, Nxchange (a white-label stock exchange where companies and financial institutions issue and trade equity and bonds). Nxchange is also the first client to launch this solution, starting in February.

"Most non-bank organisations who are entrusted with client funds use escrow accounts to manage those funds," AACB says.

"With this new service, every individual client of the non-bank organisation gets a bank account with the AACB via the blockchain. That way, fund flows between the organisation and its clients are included in payment processes under regular supervision, guaranteeing the required transparency," it explains.

By eliminating escrow account management costs, the new service "drastically reduces" administrative costs for the organisation, it adds.

AACB's Jan Bart de Boer describes Nxchange as "the ideal party to be starting



this innovation with". Nxchange is itself an innovator, he says, with its "business model geared toward efficiency and transparency".

De Boer says the bank is seeing "a great of market interest for this service". Once the new functionality is tested further, assessed and improved where required, AACB will make the offering more widely available.

Tanya Andreasyan

## Visa buys payments firm Fraedom

Visa will acquire Fraedom, a Software-as-a-Service (SaaS) technology company providing payments and transaction management solutions, for an undisclosed sum.

Fraedom has been a Visa partner for nearly ten years, and its technology underlies Visa's IntelliLink Spend Management, a core platform for its commercial and small-business clients.

Fraedom's products and services include expense management and accounts payable solutions. For over 17 years, it has been offering its products to financial institutions, payment networks, processors, governments and technology companies.

Vicky Bindra, global head of products

and solutions, Visa, says the acquisition allows it to offer a "more comprehensive business solution" to its corporate clients.

The transaction, which is subject to the customary closing conditions, is expected to close in Q1 2018.

Since its launch in 1999, Fraedom says it has managed over one billion transactions through its web-based platform, which translates to just under \$270 billion in transactions to date.

Its technology has been used by over 173,000 organisations. It has offices in the UK, US, Canada, Australia, New Zealand, Singapore and Hong Kong and manages transactions for a total of 5.7 million employees worldwide.

Antony Peyton

## Seven US states standardise fintech payments

Seven states in the US have agreed to a multi-state compact that standardises key elements of the licensing process for money services businesses (MSB).

According to the Conference of State Bank Supervisors (CSBS), if one state reviews key elements of state licensing for a money transmitter – IT, cybersecurity, business plan, background check, and compliance with the federal Bank Secrecy Act – then other participating states agree to accept the findings.

John Ryan, CSBS president and chief executive officer, says it "will minimise the burden of regulatory licensing, use state resources more efficiently, and allow for broad participation by other states across the country".

The states involved are Georgia, Illinois, Kansas, Massachusetts, Tennessee, Texas and Washington.

This development represents the first step among state regulators in moving towards an integrated, 50-state system of licensing and supervision for fintechs.

As a reminder, in May 2017, state regulators, operating through the CSBS issued a policy statement establishing the 50-state goal. CSBS then developed "Vision 2020" as a series of implementation initiatives.

That plan includes forming a fintech industry advisory panel of 33 companies to identify pain points and recommend solutions; and building a technology platform to improve licensing and supervision of non-banks.

CSBS is the national organisation of bank regulators from all 50 states, American Samoa, District of Columbia, Guam, Puerto Rico and US Virgin Islands.

CSBS, on behalf of state regulators, also operates the Nationwide Multistate Licensing System to licence and register non-depository financial service providers in the mortgage, money services businesses, consumer finance and debt industries.

Antony Peyton

## Banca IMI consolidates trading business with Murex

Italy-based Banca IMI, the investment bank of the Intesa Sanpaolo banking group, has consolidated all front office trading activities on a single platform – MX.3 from Murex.

The multi-year project started with the migration of credit, commodities, FX and rates to MX.3, and culminated with the migration of the bank's equity derivatives business onto the new platform.

Murex is a long-standing supplier to Intesa Sanpaolo, having provided its treasury and capital markets (TCM) tech to the banking group for over two decades.

The migration was completed on time and within budget, Murex states. "A key to

the success of the migration was the new relationship approach that Banca IMI and Murex developed over the course of the project," the vendor explains.

The MX.3 centralised cross-asset platform is bringing a number of business and IT benefits to Banca IMI, Murex says, such as easier interaction for trading desks (as all desks are using the same pricing models and other analytics and data), single points of entry and reporting (thus no need for reconciliation between systems), cost effectiveness and quicker time to market.

"We wanted to completely renew the IT architecture that supports our capital

markets activities, taking advantage of new technology developments and functionality," says Rodolphe Petit, head of TCM application management at Intesa Sanpaolo.

"Part of the project was the upgrade to MX.3, and in doing this, we saw the opportunity to build a new partnership with Murex. We shared a common objective and approach, and made decisions together.

"Our delivery improved with each stage of the migration, and the final equity derivatives step was a big success."

*Tanya Andreasyan*

## Deutsche Bank's multibanking service goes live

Deutsche Bank's multibanking service is now live – offering one login in its online banking to transfer money from all aggregated accounts.

The bank says it supports nearly 3,000 different banks in Germany and transaction authentication number (TAN) procedures such as iTAN, mobileTAN, pushTAN, photoTAN and chipTAN.

Michael Koch, MD and head of digital factory and head of online and mobile banking at Deutsche Bank, who also

needs a concise job title, outlined its roadmap. No timelines were provided.

There are five major steps, namely the launch of personal finance management; the launch of multi bank aggregation (i.e. balances and turnovers); and the merging of personal finance management with multi bank aggregation as one integrated omnichannel solution.

In addition, there is real-time aggregation (with every login) and real-time categorisation; and the launch of a

money transfer feature with aggregated accounts.

For the last two, Koch, visibly excited – as demonstrated by his extensive use of capital letters – says it is one of the first banks in Germany to offer such features.

Customers can activate the multibanking function and add third-party bank accounts online or in the app. The bank adds that revenues of any third-party bank accounts are stored permanently in both options.

*Antony Peyton*

## Urban FT takes over troubled Digiliti Money

Digiliti Money (formerly Cachet Financial Solutions) will become part of Urban FT, a US-based provider of digital banking software. Digiliti will merge into Urban FT's affiliate, FinTech Imaging Solutions.

Digitliti, which develops mobile banking app technology, ran into financial and organisational difficulties last year. It has been in conversations with Urban FT about a potential takeover for around six months.

"The merger is a fantastic outcome for both companies, their employees, and most importantly, for the clients we respectively serve," comments Richard Steggall, CEO of Urban FT.

He highlights the complementary



nature of the two businesses and their client bases. The products will be brought together to create a portfolio of "best-in-breed remote deposit capture and digital

banking solutions" and marketed to a unified customer base of 600+ financial institutions.

"From the beginning of this process, we recognised that the Digiliti business was fundamentally a good one," adds Steggall.

"We know our customers will be delighted by the new innovations to come," states Hunter Wolfe, EVP of business and customer operations at Digiliti.

The merger is expected to close by 24 February 2018.

Urban FT will continue to be headquartered in New York City, with development and operations located in the Minneapolis area.

*Tanya Andreasyan*

## Distribution Finance Capital seeks UK banking licence

Distribution Finance Capital (DF Capital or DFC), a subsidiary of TruFin, is looking to gain a UK banking licence.

DFC is focused on providing additional working capital to product manufacturers, distributors and dealer networks.

It was founded in 2016.

DFC's leadership team comes from various businesses of GE. CEO Chris Dailey, for example, led GE's CDF business in EMEA in the past. Most recently he was CEO at OakNorth, a UK bank focused on the SME market.

Neerav Soneji, CFO at DFC, used to work at GE Capital and CDF. Most recently, he was with Santander UK.

Alexander Pooley, COO at DFC, spent seven years at GE Commercial Finance and then five years in corporate development at another SME bank, Aldermore.

As mentioned above, DFC is owned by TruFin, a new banking and fintech firm in the UK (see p9). TruFin is, in turn, a creation of Arrowgrass, a UK-based hedge fund.

*Tanya Andreasyan*

## Bud blossoms with two new payment licences

UK-based web and mobile app Bud has got regulatory authorisation to aggregate accounts and initiate payments.

The former is via an account information services provider (AISP) licence, and the latter via a payment initiation service provider (PISP) licence. Both courtesy of the UK's Financial Conduct Authority (FCA).

Like many others, Bud says it's cashing in on FCA regulations brought about by open banking and PSD2. The licences give

Bud and its banking partners API access to customer data "from the nine biggest banks in the UK, on the request of users".

According to Bud, it can initiate a bank to bank transfer, allowing users to spend money in new ways and move money around their accounts via its platform.

The start-up says getting both these licences is "another step towards building a better banking experience for customers".

*Antony Peyton*

## Nordic banks mull common payments infrastructure

A group of Swedish, Danish, Norwegian and Finnish banks is mulling the establishment of a pan-Nordic payment infrastructure supplemented by common products.

The banks involved are Danske Bank, DNB, Handelsbanken, Nordea, OP Financial Group, SEB and Swedbank.

SEB says the current infrastructures are "highly fragmented along national borders".

Their plan is to create, within the Nordics, an area for domestic and cross-border payments in multiple currencies (SEK, DKK, NOK and EUR).

Based on open access and common European standards, the infrastructure will "contribute to increased competition" among payment service providers in the region.

The initiative shares the objectives of current domestic infrastructure projects in Norway and Sweden but aims at achieving them on a Nordic scale.

This is just the first stage and there are not a lot of details.

Consultations with relevant stakeholders will take place as appropriate – and no doubt we will hear more about their ambitions later.

*Antony Peyton*

## ION acquires treasury tech vendor Openlink



Openlink Financial, a provider of trading and risk management tech for the energy, commodities and financial services industries, has been acquired by ION Investment Group.

The seller is Hellman & Friedman, a private equity firm that has owned Openlink since 2011 (it purchased the tech firm from another PE company, The Carlyle Group).

ION, via its ION Trading technology subsidiary, already owns most of the key treasury management software (TMS) providers, including Wall Street Systems, IT2 and Financial Software Systems (FSS). The two exceptions at present on the international scene are Calypso and Murex.

Although Andrea Pignataro, ION's CEO, describes Openlink's solutions and expertise as "highly complementary to ION's business", Openlink directly competes with Wall Street Systems in the financial services/banking space. Most recently, both companies bid for a project at the European Central Bank (ECB). When Openlink emerged as the winner, Wall Street Systems – the incumbent tech provider to ECB – took the bank to court.

"Openlink is in a great position to capitalise on its track record, strong customer relationships and the substantial investments made in its product portfolio," says Ben Farkas, partner at Hellman & Friedman.

UBS Investment Bank acted as exclusive financial advisor to ION and provided committed financing in support of the transaction.

Centerview Partners acted as exclusive financial advisor to Openlink.

Linklaters served as legal counsel to ION, while Simpson Thacher & Bartlett served as legal counsel to Hellman & Friedman and Openlink.

*Tanya Andreasyan*

## KBC in group-wide tech renovation project with Temenos

Belgium-based banking group KBC is undergoing a major technology modernisation enterprise wide, with Temenos as the main tech supplier.

Temenos is already supplying its flagship T24 core banking system to KBC in Ireland and says the two parties have built “a good relationship”.

The banking group is on a “progressive renovation” journey of its international operations and is working with Temenos to roll out the new core banking platform across multiple geographies.

As part of its group strategy, KBC will set up an open architecture IT package as core banking system for its international markets unit. It will also create a common competency centre, BE@T.

There will be one centrally managed infrastructure and all countries will gradually migrate to the agreed target architecture. However, dedicated programmes will be run by the country managers.

All T24 modules will be upgraded at least every three years – the bank will

apply the “stay together” (enabling sharing) and “stay current” (latest developments) approach.

There will be no internal T24 development or customisations of the core system’s modules, unless agreed by the bank’s design board.

Also, KBC says it aims to improve the applications it offers its clients – a one-stop-shop offering – via co-creation/partnerships with fintechs and other value chain players.

*Tanya Andreasyan*

## US DoJ shuts down payment card fraud ring

The US Department of Justice (DoJ) has indicted 36 defendants for alleged roles in a transnational criminal organisation responsible for more than \$530 million in losses from cybercrimes.

This was one of the largest cyberfraud enterprises ever prosecuted by DoJ. The gang, called the Infracard Organisation (bit of a giveaway), were engaged in the large-scale acquisition, sale, and dissemination of stolen identities, compromised debit and credit cards, personally identifiable information, financial and banking information, computer malware, and other contraband.

Following the return of a nine-count superseding indictment by a Las Vegas grand jury alleging racketeering conspiracy and other crimes; federal, state, local, and international law enforcement authorities arrested 13 defendants from the US,

Australia, UK, France, Italy, Kosovo and Serbia.

Acting assistant attorney general John P. Cronan of DoJ’s Criminal Division, says: “Infracard operated like a business to facilitate cyberfraud on a global scale. Its members allegedly caused more than \$530 million in actual losses to consumers, businesses, and financial institutions alike – and it is alleged that the losses they intended to cause amounted to more than \$2.2 billion.”

According to the indictment, the Infracard Organisation was created in October 2010 by Svyatoslav Bondarenko from Ukraine, to promote and grow interest in its nefarious ambitions as the premier destination for carding – i.e. purchasing retail items with counterfeit or stolen credit card information – on the internet.

They even had a slogan, “In Fraud We Trust”, and the organisation directed traffic and potential purchasers to the automated vending sites of its members, which served as online conduits to traffic in stolen means of identification, stolen financial and banking information, malware, and other illicit goods. And a lot of other nasty stuff.

The charges in the indictment are “merely allegations, and the defendants are presumed innocent until proven guilty beyond a reasonable doubt in a court of law”.

Trial attorneys Kelly Pearson and Chimaobim Nwachukwu of the Criminal Division’s Organised Crime and Gang Section and assistant US attorney Chad W. McHenry of the District of Nevada are prosecuting the case.

*Antony Peyton*

## Standard Chartered signs for Moneythor’s digital toolkit

Moneythor, a Singapore-based fintech firm, has gained a new taker for its digital banking toolkit and personalisation engine – Standard Chartered.

“The initial deployment will add advanced client-facing transaction insights to the roll-out of its chatbot service for the Hong Kong market,” Moneythor says.

The project is in line with the bank’s objective to be “the digital bank with a human touch”, the vendor adds.

Moneythor’s solution will be used for transaction data classification and to deliver tailored recommendations, actionable insights as well as personal finance management (PFM) features, leveraging both its rules-based expert system capabilities and statistical algorithms, to Standard Chartered’s clients.

Deniz Güven, global head of design and client experience at Standard Chartered, hopes the new chatbot initiative will make

banking “more personal, conversational, and less transactional”.

Oliier Berthier, CEO of Moneythor, says adding a tier one bank such as Standard Chartered to its customer list is “extremely rewarding”. He feels the bank has “real commitment to digital banking and technology”.

Moneythor’s other customers include Crédit Mutuel Arkéa and Orange Bank.

*Tanya Andreasyan*

## UK regulator plots global fintech sandbox

The UK’s Financial Conduct Authority (FCA) is looking for views on the merits of creating a global fintech sandbox.

This new model could potentially allow firms to conduct tests in different jurisdictions at the same time and allow regulators to work together and identify and solve common cross-border regulatory problems, through tests. Under such a model, testing could span two or more jurisdictions.

Since it was launched in 2016, its sandbox has supported 60 firms in the UK to test their ideas with real customers in the live market under controlled conditions. As reported in December, its fourth sandbox phase was looking for new faces.

This UK model reduced the time and cost of getting ideas to market, and the

FCA says 90% of firms that tested in cohort 1 progressed towards a wider market launch.

However, the FCA explains that its sandbox currently only allows firms to conduct tests in the UK “but many aspects of financial markets and fintech are global”.

It says: “Some firms value being able to work with other regulators to conduct tests in more than one jurisdiction. We have also observed, supported and learned from the work of many other jurisdictions in how they promote innovation in financial services.”

The FCA also cites its nine bilateral cooperation agreements with other jurisdictions.

Therefore, in terms of its worldwide ambitions, it wants your views on the

mega-model. To give you an idea of what the FCA thinks a global sandbox should look like, it sets out a few pointers.

It says it knows firms face certain regulatory problems that cross jurisdictional boundaries, for example developing solutions to anti-money laundering (AML) compliance and know your customer (KYC) onboarding, and payments services that seek to transfer money cross-border.

The global sandbox could also convene joint events and/or papers on emerging trends and challenges.

According to the FCA, one option is that the initial set up is an international college of regulators who have their own innovation or sandbox models.

*Antony Peyton*

## TruFin steps into UK challenger bank zone

UK challenger bank TruFin is now up and running, and has started trading on the alternative investment market (AIM) of the London Stock Exchange.

The bank, a creation of independent AIM firm Arrowgrass, has conducted a conditional placing and subscription of ordinary shares to raise around £70 million in funding.

TruFin is a holding company comprising three fintech and banking businesses – Distribution Finance Capital (DFC – supply chain finance, see p7), Satago (invoice finance) and Oxygen Finance (dynamic discounting).

Henry Kenner, CEO of TruFin, says listing on AIM will allow it to “provide further capital to our subsidiaries and scale faster, and take advantage of any developments in the current financial services market”.

To give you some background, the bank was established through a series of acquisitions and investments by Arrowgrass between 2014 and 2017. TruFin currently has 100 employees, and offices predominantly in the UK and a small team in the US.

In addition, TruFin owns a c. 15% minority stake in Zopa, a UK consumer



P2P lender, which operates independently. DFC and Zopa are pursuing UK banking licences.

In 2013, Arrowgrass says it became interested in P2P lending platforms as these were “reliable originators of high-yielding assets”.

This led to the formation of the alternative finance team led by James van den Bergh and their first investment, Zopa. Kenner, co-founder and CEO of Arrowgrass, joined the team in 2015, leading it with van den Bergh.

In connection with the IPO, Kenner, van den Bergh and “certain other members”

of the management team have left Arrowgrass to become employees of TruFin.

The team behind TruFin have plenty of experience (and no doubt, connections). Kenner has 30 years of investment banking and capital markets experience. Such as Deutsche Bank, Swiss Re Capital Management and ABN Amro.

Van den Bergh has a bit less, with over 16 years’ experience. He’s worked at Merrill Lynch, SAC Capital Advisors, Walter Capital Management and Ivaldi Capital.

In terms of Arrowgrass. It first invested in Zopa in January 2014. In February 2016, Arrowgrass added Oxygen Finance to its portfolio. Arrowgrass funded the incorporation of DFC in May 2016 and DFC commenced lending in March 2017. In February 2017, Arrowgrass acquired Satago, an SME cash flow management platform.

In November 2017, Arrowgrass incorporated TruFin as a wholly-owned subsidiary, and in December 2017, Arrowgrass transferred its fintech and banking assets to a subsidiary of TruFin.

*Antony Peyton*

## US challenger Marathon International Bank to join fintech race

A new bank is set to launch in the US to cater for the Ethiopian American community, Marathon International Bank.

The bank will be based in the Washington DC area. Its founders are Tekalign Gedamu, a retired economist and former MD of the Development Bank of Ethiopia, and Tesfaye Biftu.

An application to organise a district bank has recently been filed with the Commissioner of the Department of Insurance, Securities and Banking, and so has an application to obtain federal deposit insurance with the Federal Deposit Insurance Corporation (FDIC).

Gregory Garrett, formerly president and CEO of Texas-based Platinum Bank, will serve as Marathon's CEO, it is understood.

Zekarias Tamrat will be the bank's president. Tamrat spent 17 years at Bank of America – he was a regional VP and GM manager when he left the bank in late 2015. He was then VP and banking centre manager at PNC.

The new bank will have "a wide shareholder base capable of guiding the bank's operations, growth, and its long term trajectory", it says on LinkedIn.

It plans to raise \$22-25 million by selling common stock.

"Our vision is to help transform the Ethiopian community into a far more economically engaged, creative and vibrant member of the wider and diverse US community.

"To become a differentiated provider of financial services by leveraging our understanding of the unique financial needs of the Ethiopian American community."

Other de-novo banks in the US include Endeavor Bank in California and Studio Bank in Tennessee. Both are currently information.

*Tanya Andreasyan*

## BinckBank and Raisin double up for Dutch savings market

BinckBank says it will be the first in the Dutch banking sector to offer its clients access to European savings products via its cooperation with Raisin.

The bank has launched a new product "Binck Savings" (in Dutch: Binck Sparen), enabling Dutch savers to deposit funds with selected European partner banks that offer "attractive" interest rates on their term deposits. Customers can directly deposit funds online via a single account at Binck Savings.

Vincent Germyns, CEO of BinckBank, says its product is a "perfect alternative for



the saver struggling with the current low interest rates".

It is not the first time that Raisin has integrated its service into a third-party provider via open banking.

In 2017, German mobile bank N26 was the first to integrate Raisin's service. Raisin says it is also the first company that was authorised to join BBVA Connect. This allows its customers to access third party services by using their existing login credentials. Raisin is also testing single sign-on access with Verimi.

*Antony Peyton*

## Global fintech funding goes over \$31bn mark

Go globe! A strong investment of \$8.7 billion in Q4 2017 propelled global fintech funding over the \$31 billion mark for 2017 – bringing the total over the past three years to \$122 billion.

According to the KPMG "Pulse of Fintech" report, while global deal volume declined in Q4, the number of venture capital (VC) transactions exceeded 1,000 for the fourth consecutive year in 2017, with private equity (PE) deals reaching a new high of 139. M&A also ticked up for the year with 336 transactions in 2017.

Among sub-sectors, both insurtech and blockchain saw record levels of VC investment and deal volume in 2017, with insurtech accounting for \$2.1 billion across 247 deals and blockchain generating \$512 million of investment across 92 deals.

Ian Pollari, global co-lead, KPMG Fintech, says: "As the sector matures, investors have shifted from experimenting with fintech to seeking out value-driven opportunities. This is particularly true for corporates who continue to invest and see fintech as a strategic play that will help accelerate their digital transformation agendas."

### REGIONS RATED

Geographically, the US saw almost two-thirds of global investment in Q4 2017,

with \$5.8 billion in funding raised, and almost half of the 2017 global total, with \$15.2 billion raised for the year. M&A accounted for the majority of this funding, with \$8.7 billion in deals in 2017. US PE funding in Q4 2017 achieved its second highest quarter ever at \$3.4 billion.

Investment in Europe reached over \$2 billion in Q4 2017, with VC investment achieving a new record of \$960 million – while total investment for 2017 reached \$7.44 billion.

Despite "ongoing economic uncertainty related to Brexit", the UK continued to see "resilience" in its market – accounting for \$1.6 billion of Europe's total investment.

In Asia, investment moderated to \$748 million for the same period, and reached \$3.85 billion for all of 2017, after more than \$10 billion in funding in 2016.

Decreased investment in China accounted for much of the decrease in investment in Asia. China saw \$45.8 million in investment in Q4 2017, while total investment in 2017 was \$1.33 billion.

Funding in the Americas rose slightly quarter-over-quarter, with \$5.9 billion invested across 168 deals. In total for 2017, the Americas saw \$19.8 billion invested across 711 deals.

Brazil had an "excellent showing", with a \$50 million raise by Creditas breaking into the top ten deals in the region.

### ANGELS WITHOUT DIRTY FACES

If you still have a stomach for more stats than a maths exam, then keep reading.

The median deal size for angel/seed-stage deals was up to \$1.5 million, compared to \$1 million in 2016, while the median deal size for early-stage rounds was also up to \$5.5 million from \$5.1 million in 2016. The median deal size of late-stage deals decreased year-over-year, from \$19.1 million to \$16 million.

Corporate participation in VC deals reached a record high of 19% in 2017, although corporate VC investment globally was down significantly year over year, with \$5.4 billion invested in 2017 compared to \$9.6 billion invested in 2016.

You can't hurry a Murray, so the final word goes to Murray Raisbeck, global co-lead, KPMG Fintech: "So much is happening – from the increasing focus on insurtech and blockchain, to the ramifications of maturing companies, such as challenger banks, looking to expand and grow. With regulations changing, particularly in Europe – 2018 will likely be an exciting year."

*Antony Peyton*

## UK money platform Nudgg pushes to launch

UK-based personal financial management start-up Nudgg is prepping for launch.

The firm, which was founded last year, is offering a service that gives "marginal gains" for saving. Like many other start-ups it wants to provide an app that helps users "do a little more and save towards bigger things in life".

Nudgg calls itself an "impartial money platform" which allows retail customers to view all their financial accounts in one place and make direct comparison against

each of those accounts.

It also provides education and insights to consumers; and its product will be available on mobile, desktop and as an app (Android and iOS).

Nudgg reckons there is an "abundance of tools" – such as open banking – available to consumers as part of a "shift towards secure hyper-convenience".

In fact, in January on Twitter, the company said it was looking to integrate with UK challenger bank Monzo's APIs.

Nudgg is currently in beta mode and is offering sign ups to customer on its website ahead of its launch. No official launch date has been set yet.

The start-up was founded by the brothers Charlie and Tom Richardson.

Charlie has worked at Munich Re and Oakwell Capital, and as a private client stockbroker at Redmayne Bentley.

Tom has been employed at firms such as MB Capital and Investment Management.

*Antony Peyton*

## Wizards of Oz pull back curtain on open banking

The final report into a review on open banking in Australia has been released – and the public consultation is not over yet.

To give you some background, on 20 July 2017, Scott Morrison MP commissioned the Open Banking Review, chaired by Scott Farrell who was asked to recommend the most appropriate model for open banking in the country.

As with the UK model, the idea is to give customers greater access to and control over their banking data.

The 158-page report published by the Australian government makes 50 recommendations, on the regulatory framework, the type of banking data in scope, privacy and security safeguards for banking customers and more.

That report is the usual long-winded generic stuff that floats in the fintech ether. But to give you an idea it says "customer data should be transferred via APIs" and a "period of approximately 12 months should be allowed from a final government decision on open banking for implementation". There is nothing that exciting or surprising in it.

Back to modern history again, and on 26 November 2017, Angus Taylor MP, the then Assistant Minister for Cities and Digital Transformation, announced the development of a national Consumer Data Right (CDR).

The Treasurer will be leading the development of the CDR, with the design of the broader CDR informed by the recommendations of the Open Banking

Review. The announcement formed part of the government's response to the recommendations of the Productivity Commission's Inquiry into Data Availability and Use. The CDR will give customers the right to access their data in a machine-readable form.

The government has decided that the CDR will be implemented economy-wide on a sector-by-sector basis.

While the Open Banking Review has "consulted extensively", the government is looking for more comments on the recommendations before making final decisions on implementation.

Submissions should be lodged by 23 March 2018.

*Antony Peyton*

## SGBL turns to Backbase for digital revamp



Lebanon-based Société Générale de Banque au Liban (SGBL) has chosen Backbase for a revamp of its front-end banking solutions.

SGBL will replace its legacy internet and mobile banking systems with Backbase's omnichannel digital banking platform.

Roll-out has begun in Lebanon, and the first go-live happened in December 2017 for domestic internet and mobile banking, with a further regional roll-out planned for subsidiaries in Jordan, Cyprus and the UAE.

Antoun Sehnaoui, chairman and CEO of SGBL, says Backbase will "enhance agility in our suite of distribution channels as we adapt to a dynamic retail and corporate client base".

SGBL sees a range of trends emerging in the region for banking products, where the sector faces several challenges; local regulators impose tight constraints, market conditions can be difficult, and fintechs have introduced a new level of disruption.

According to Backbase, its platform will enable SGBL to be the first to offer PSD2 (the revised Payment Services Directive) to clients and comply with international open banking regulations and standards.

For its back office tech, SGBL is a long-standing customer of BML Istisharat – it uses the ICBS core system for its domestic operations as well as in Cyprus and Jordan. In 2014, the bank signed with Temenos to implement its T24 system at home and internationally, but the project is yet to come to fruition, *Banking Technology* understands.

The ICBS solution has also been implemented at SGBL's start-up venture in the UAE, Liberty International Bank.

Antony Peyton

## South African Reserve Bank mulls cryptocurrency regulations

The South African Reserve Bank (SARB) is reviewing its position on private cryptocurrencies as it looks for an appropriate policy framework and regulatory regime.

Like many other regulators and banks around the world, cryptocurrencies are getting a rougher ride. Laissez-faire? Leave it out. It's all gone hardball.

Cryptocurrencies have also had some bad press recently. Two examples are the SEC stopping an alleged AriseBank ICO scam in the US; and hackers stealing \$534 million from the Coincheck cryptocurrency exchange in Japan.

In terms of SARB, its recently established "Financial Technology Programme" will focus on three primary objectives.

The first one is the aforementioned cryptocurrencies and it will address regulatory issues such as "clearing and settlement risks, exchange control impacts, monetary policy and financial stability, and other matters such as cybersecurity considerations".

Through collaboration with the other regulatory bodies, matters such as tax implications, consumer and investor protection, and money laundering activities will also be addressed. SARB expects to complete the review in the second half of 2018.

The second objective is to investigate "innovation facilitators" – a new form of jargon to describe innovation hubs,

regulatory sandboxes and accelerators. SARB hopes to have concluded its assessment by Q3 this year.

The third objective is to launch "Project Khokha" which will experiment with distributed ledger technologies (DLTs) and see ConsenSys assist SARB in the design and setup of the infrastructure.

The aim of this project is to gain a practical understanding of DLTs through the development of a proof of concept (PoC) in collaboration with the banking industry. The PoC will replicate interbank clearing and settlement on a DLT which will allow SARB and the industry to jointly assess the potential benefits and risks.

The POC involves the processing of wholesale payments using Quorum, an Ethereum enterprise DLT. ConsenSys will help out here.

SARB says this "does not imply a radical move to DLT for the country's national payments infrastructure, but rather a structured approach to understand the implication of using a tokenised asset on DLT technology to transfer value".

A public report will be released in Q2 2018.

By the way, "Khokha" may be a reference to IsiNdebele, a language of the Matabele / amaNdebele people of Zimbabwe and spoken in Southern Africa. It means to "draw out" (such as a word) or "pull out". Perhaps hinting at the experimentation angle of the project. SARB doesn't say.

Antony Peyton

## Saudi Arabian Monetary Authority pilots Ripple payments

Ripple has signed an agreement with the Saudi Arabian Monetary Authority (SAMA) to support the nation's banks in a blockchain-fuelled payments pilot.

Together, they have created a programme to help banks use xCurrent, Ripple's enterprise software solution that instantly settles cross-border payments with end-to-end tracking.

According to Ripple, this is the "first of its kind to be launched by a central bank",

and SAMA will support Saudi banks with management and training.

Dilip Rao, global head of infrastructure innovation, Ripple, says: "Central banks around the world are leaning into blockchain technology in recognition of how it can transform cross-border payments, resulting in lower barriers to trade and commerce for both corporates and consumers."

Antony Peyton

## Santander to launch blockchain-based payments

Santander is planning to introduce blockchain-based mobile international payments for its retail clients in Q1 this year, according to the bank's latest earnings presentation.

The bank's innovation is mobile payments in "three clicks and 40 seconds" for consumers, using distributed ledger

technology (DLT) developed by Ripple.

The offering is set to go live in four countries this quarter: Spain, Brazil, Poland and the UK, "with full transparency on fees and FX upfront", Santander says.

The potential is vast, the bank notes, with a €10 billion (\$12.5 million) target market for international retail payments.

"We expect to be one of the first global banks to roll out DLT-based payments for individuals," the bank states.

Santander made an initial investment into the project in September 2015, and has been working on a number of blockchain-based payment initiatives with Ripple since then.

Tanya Andreasyan

## Temenos to buy trading platform firm Fidessa for £1.4bn

Temenos has reached an agreement on the terms of an all cash acquisition of Fidessa, which values the trading platform provider at £1.4 billion.

Fidessa shareholders will be entitled to receive £35.67 in cash for each Fidessa share.

Temenos says its enlarged group is expected to have (on a pro forma basis), for the year ended 31 December 2017, revenues in excess of \$1.2 billion and an EBITDA margin of 32.3%.

The Temenos board says it expects the transaction to generate approximately \$60 million per annum of run-rate pre-tax cost synergies, which are expected to be fully achieved within three years post completion. The EBITDA margin for the enlarged group is expected to increase

from 32% to 37% pro forma for the run-rate cost synergies.

Andreas Andreades, Temenos' executive chairman, says the deal will "accelerate both companies complementary growth strategies in banking and capital markets and will enable us to cross-sell into our existing client bases and capture a greater share of the IT and software spend of banks especially as they move to the cloud".

Andreades adds: "The capital markets industry is undergoing structural changes that will require it to renew its software systems. However, the current vendor landscape is fragmented and dominated by legacy technology. This creates a huge opportunity to combine the complementary product strengths of Fidessa and Temenos in the front and back office."

On 19 February, Fidessa released its financial results for the year ended 31 December 2017 – and its revenues rose by 7% to £353.9 million.

Temenos also had some good financial results. It enjoyed a decent 2017 with a total software licensing growth of 22%, retaining the momentum gained in 2016.

If you had forgotten, back in 2016 it revealed a total software licensing growth of 21% and earnings growth of 20%.

In its latest flurry of stats, Temenos says tier 1 and 2 banks contributed 59% of its total software licensing in FY 2017, and it had 65 new customer wins.

And if you had forgotten another matter, SoftBank was rumoured to be acquiring Temenos, but this was denied.

Antony Peyton

## Ripple fuels UAE Exchange's cross-border payments

UAE Exchange has chosen Ripple's blockchain technology to power its real-time cross-border payments.

Via the deal, UAE Exchange joins RippleNet, its enterprise blockchain network with over 100-member banks and financial institutions. This offers real-time messaging, clearing and settlement of financial transactions for banking and payment partners.

Promoth Manghat, CEO of UAE Exchange, says: "The early adoption of this game-changing technology allows us to offer a competitive service, as it will have an impact on the speed and cost of cross-border transactions."

Both firms have also been active elsewhere.



Just a few days ago, UAE Exchange was revealed to be one of the names in a consortium for an electronic know your customer (e-KYC) utility in the UAE.

The Financial Services Regulatory Authority (FSRA) of Abu Dhabi Global

Market (ADGM) started the development. Distributed ledger technologies (DLT) are being considered to underpin core functionality within the platform.

Ripple, as usual, is busy. Hong Kong-based money service LianLian International chose its blockchain solution, xCurrent, to process real-time cross-border payments into China.

In addition, Forbes released a handy "Crypto Rich List" – a compilation of the 20 wealthiest people in crypto. Chris Larsen, a long-time tech executive and founder of Ripple, came top with a net worth close to \$20 billion in early January 2018, as a result of owning 5.2 billion XRP, the token of Ripple.

Antony Peyton

## Vermeg buys regtech firm Lombard Risk for £52m

Verweg, a securities processing and fund administration software vendor based in the Netherlands, has completed the acquisition of UK-based Lombard Risk.

Lombard Risk, which specialises in risk management and regtech solutions, has been bought by Verweg in an all-cash deal, valuing the company at £52.08 million.

Lombard Risk was founded in 1989 by John Wisbey, who also led the company until May 2015. Although he then relinquished the CEO role and left the firm "to pursue other opportunities", he remained its significant shareholder (with a 36% stake).

In 2016, he founded Convendia, a provider of cloud-based forecasting solutions to boards and management.

In a LinkedIn post, he describes

the completion of the Lombard Risk acquisition as "a big landmark for the company".

"My thanks to all the loyal colleagues who worked at Lombard Risk for many years to build excellent risk and regulatory products and deep client relationships, and to our wonderful customers drawn from over 250 financial institutions," he says.

According to an announcement made by Verweg on the London Stock Exchange in January, once the acquisition is completed, "Lombard Risk will operate as it does today under its existing executive management team within the Verweg Group".

Badreddine Ouali, founder and chairman of Verweg, emphasises that his company "regards the management and

employees of Lombard Risk as key to the ongoing success of the combined entity".

He adds: "With highly complementary offerings and minimal overlap regarding geographies and product portfolio, the combination provides a strong platform for future growth and value creation."

Philip Crawford, chairman of Lombard Risk, notes "very strong commercial logic" of the merger, as he sees the "value at a level in excess of the risk adjusted prospects of Lombard Risk on a standalone basis".

Verweg was founded in 1993 in Tunisia. Its HQ is now in Amsterdam and it has offices in Belgium, France, Luxembourg, Spain and Tunisia. It employs 700 people and has 150+ financial institutions on its client list.

*Tanya Andreasyan*

## Avaloq gains first core banking tech client in Thailand

Thailand-based Kasikornbank (Kbank) has chosen the Avaloq Banking Suite for its private banking and wealth management business.

The Avaloq core system will be used to upgrade the bank's customer service infrastructure and to improve internal processes – such as client relationship management and risk management. The project will be Avaloq's first in Thailand.

Jirawat Supornpaibul, Kbank private banking business group head, says the private banking and wealth management sector in Thailand is "seeing significant growth and, as a consequence, the market has become very competitive" – and in turn it has selected Avaloq "to take our private banking business forward".

In December 2017, Avaloq reminds people it appointed Chris Beukers to its group executive board as the head of

Asia Pacific. The vendor says it intends to "substantially grow its presence" in the APAC market. It already has customers in Singapore, Hong Kong and Australia.

Established in 1945 and formerly known as Thai Farmers Bank, Kbank had total assets of THB 2.8 trillion (\$85.8 billion) as at the end of September 2017. Kbank's private banking business has around \$20 billion in assets under management.

*Antony Peyton*

## Jyske Bank turns to Munnypot for robo-advisory tools

UK-based robo-advisor Munnypot has inked a deal with Denmark's Jyske Bank. This marks Munnypot's first white-label partnership in continental Europe.

Munnypot will work with Jyske Bank to offer a new solution, Jyske Munnypot, that provides online investment advice. The new tool will offer clients regulated investment advice along with monitoring and notifications of their investment performance. The goal-based solution will be available to Jyske Bank clients in the first half of this year.

CEO and co-founder of Munnypot, Andrew Fay, says he is "delighted to partner with Jyske Bank and bring the Munnypot



service to one of the most prestigious banks in Europe".

"We know, first hand, the time and resources required to build a robust online investment advice proposition and that for

most firms, partnering is the best and most efficient route to developing an innovative, client-engaging service," he notes.

René Schjøtt Brogaard, Jyske Bank's head of investment solutions, adds the two partners share a goal to "help people make the right investment decisions by building an innovative, engaging and customer-focused proposition".

Founded in 2015, Munnypot allows users to begin investing with as little as £25 per month and/or a £250 single payment into an individual savings account (ISA), junior ISA (JISA), general investment account (GIA), or pension fund.

*Julie Muhn, Finovate*

# Your call is important to us

Virtual agent Amelia answers Credit Suisse's call for tech support.

Credit Suisse has recruited New York-based artificial intelligence (AI) tech vendor IPSoft for a "pioneering development" – an "in-house virtual agent who helps thousands of employees with day-to-day tech problems".

The virtual agent – Amelia – is not just smart, says Credit Suisse, "but also has some human qualities such as emotional awareness. For example, Amelia perceives when people are irritated or frustrated".

Amelia was launched into live production at Credit Suisse's global IT service desk at the end of last year, and is set to handle nearly half of all requests from the bank's employees, from routine level-one issues (e.g. email is stuck, password needs resetting, Wifi will not work, rebooting your machine) to more complex level-three incidents and resolve them from end to end.

Amelia seamlessly integrates into multiple desktop applications, Blackberry engines and knowledge management systems.

It is understood that by the end of the pilot programme at Credit Suisse, Amelia reached a high of 87% accuracy during conversations.

To "educate" Amelia, Credit Suisse created an in-house team. "First she needed to understand what people are saying. Car park or parking lot, lift or elevator, rubber or eraser: YOU know they are the same things, but Amelia has to be taught," the bank explains.

"Next she learned to diagnose a problem, to decide whether it is something she can fix, and if not, hand over to a human colleague – so she must be familiar with the processes and systems in our business. Oh, and she has to avoid irritating the people seeking IT support – there is actually an algorithm for that. All along, Amelia learns how to do new things, mostly by watching how humans do them."



"Oh, and she has to avoid irritating the people seeking IT support – there is actually an algorithm for that."

**Credit Suisse**

Amelia is there 24x7, every day of the year – no breaks or holidays.

Requests come to her via text, in English, from anywhere, and she responds "fluently and naturally, in human style", the bank says. E.g. "Have you tried turning it off and on again? Would you like me to reset your password?"

Credit Suisse emphasises that IT support from humans is "still very much needed" as Amelia cannot fix everything – "not by a long shot".

"But what Amelia can fix, she fixes quicker than ever before. And she is always available, no waiting required – which is critical, because users are very sensitive to wait-times for IT help, and they always welcome a quicker response."

The bank says the response to Amelia among its employees have been varied and "typically human": some people were thrilled, some unimpressed and some annoyed. But the IT support team has welcomed her onboard. "They have long tired of telling people to reboot; they prefer to tackle more difficult problems," the bank explains.

In time, Credit Suisse hopes the virtual agent will evolve to solve more complex problems and learn to speak other languages.

Some of future plans for Amelia beyond supporting a global IT service desk include a role on the trading floor, helping audit and compliance teams out. Typically, it takes a qualified trader 20 minutes to complete a trade, but Amelia could potentially help bring this time down to just two minutes.

IPSoft also supplies its AI-based virtual agent to Nordic banks Nordnet and SEB. **bt**

*Tanya Andreasyan*

# Adventureland

Last month, Australia launched its New Payments Platform (NPP), the result of the Strategic Review of Innovation conducted by the Payments System Board and released in June 2012.

Sydney, Australia

Other reforms of the country's payment system included the introduction of same-day settlement for direct entry transactions and the formation of the Australian Payments Council.

The reformist zeal is not limited to Australia, of course. Across the world, payments infrastructures are being overhauled to cope with the inexorable shift towards electronic payments. World Payments Report 2017 found that global non-cash transaction volumes grew 11.2% during 2014-2015 (the most recent full year of analysis) to reach 433.1 billion, the highest growth of the past decade. Two regions fuelled this increase: emerging Asia (which includes China and India) with a growth rate of 43.5% and Central Europe, Middle East and Africa, with growth of 16.5%.

Payments authorities are seeking to create new infrastructures for such payments and to increase competitiveness, while creating information-rich, faster and more secure payments. Reforms are under way in the UK, led by the Payment Systems Regulator (PSR), and in Canada, the US, Japan, Norway and Nigeria to name but a few.

Speaking at the Australian Payment Summit in Sydney during December last year,

Philip Lowe, governor of the Reserve Bank of Australia, said in his country, most money is already digital or electronic. "Only 3.5% of what is known as 'broad money' in Australia is in the form of physical currency," he said. The rest is in the form of deposits, which, most of the time, can be accessed electronically. The bulk of what is called money in Australia is already electronic.

With most money available electronically, there also has been a substantial shift to electronic forms of payments. According to the RBA's regular survey of consumers, in 2007 cash accounted for 70% of transactions made; it has now fallen to 37%. Another indicator of the shift to electronic payment is the fall in cash withdrawals from ATMs, which reached a peak in 2008, but has since fallen by nearly a quarter. Finally, the number of debit and credit card transactions using the direct entry system has grown at an average annual rate of 10%.

"There has been a significant shift away from people using banknotes to making payments electronically. Most recently, Australia's enthusiastic adoption of 'tap-and-go' payments has added impetus to this shift. In many ways, Australians are ahead of others in the use of electronic payments, although

we are not quite in the vanguard. It is also worth pointing out, though, that despite this shift to electronic payments, the value of banknotes on issue is at a 50-year high as a share of GDP. Australians are clearly holding banknotes for purposes other than for making day-to-day payments," said Lowe.

The continuing existence of cash in circulation is a global phenomenon identified by World Payments Report. It found: "Despite the increased adoption of digital payments, cash continues to be in the mainstream, especially for low-value transactions such as payment for food and personal care supplies, general merchandise and gifts. It is also used for peer to peer (P2P) transfers, despite the increasing popularity of P2P money transfer apps such as Venmo and PayPal."

Other key factors contributing to the persistence of cash are the anonymity a cash transaction provides, a lack of modernised payment infrastructure in some countries and limited or no access to the banking system in developing markets.

The ratio of cash in circulation (CIC) to GDP is increasing at a higher pace globally except in Denmark, the UK, Sweden, Canada and South Africa. The Report suggests that this increase may hamper efforts to create

cashless societies. "The continued rise in the total share of cash in overall GDP has become a key challenge globally and could emerge as an impediment to the transformation into digital, or cashless economies."

However, many countries have recognised the problems associated with an increasing CIC to GDP ratio and are taking measures to embrace digital payments. These measures include structural reforms and payments infrastructure modernisation.

In Australia, Lowe believes that the shift towards electronic payments, and away from the use of banknotes for payments, will "surely continue". The increased use of mobile payment apps and other innovations will drive this. However, for many people, and for some types of transactions, banknotes are likely to remain the payment instrument of choice.

Lowe points up that the banking system has provided the infrastructure that has made the shift to electronic payments possible in Australia. In some other countries, such as China and Kenya, the banking system has not done this. Here, non-bank entities have been at the forefront of recent strong growth in electronic payments. "A lesson here is that if financial institutions do not respond to

"In many ways, Australians are ahead of others in the use of electronic payments, although we are not quite in the vanguard."

Philip Lowe, Reserve Bank of Australia

customers' needs, others will," said Lowe.

Given the substantial investment Australia's financial institutions have made in the NPP, it seems likely that the banking system will continue to provide the infrastructure that Australians use to make electronic payments, he added.

The key features of the NPP include:

- 24x7 instant payments and real time,

line by line settlement via the RBA;

- PayID, which links a financial account with an identifier such as a mobile phone number, email address or Australian Business Number for businesses;

- open access infrastructure that encourages innovation through competition;
- overlay services framework that will provide new value services to Australian consumers, businesses and government.

Brussels-based financial messaging consortium Swift helped to design, build and deliver the NPP and will play a role in operating the infrastructure.

The platform is a component within Swift's broader global instant payments strategy, which also includes the provision of an instant payments messaging service for the euro area. This will be launched in November 2018, to coincide with the launch of Target Instant Payment Settlement (TIPS), the euro real-time payments service commissioned by the Eurosystem. Swift's messaging service will allow instant payments to be made in euros across Europe through both TIPS and EBA Clearing's RT-1 instant payments system. **bt**

Heather McKenzie,  
freelance journalist and editor, FinTech Eye

# Open banking: what you need to know

The landscape for financial services is changing, and the jury is still out on how the endgame is going to play out. However, one of the concepts starting to stand out as inevitable is open banking. *Christoffer O. Hernæs*, chief digital officer at S-Banken, gives the lowdown and plenty of practical examples.

This development emerges out of a perfect storm of shifting customer behaviour, regulatory changes, the threat from digital ecosystems such as Google, Apple, Facebook and Amazon (GAFA), and the quest for new business models are driving banks toward open banking.

The coming European Payment Services Directive (PSD2) is requiring banks to open up the payment infrastructure to third-party providers. New business models based on a platform economy is threatening existing revenue streams.

As an example, the P2P lending industry is seeing significant growth, especially in developed countries with strong financial markets. In 2015, the alternative finance industry in the US grew to \$36.49 billion, a 212% annual increase from the \$11.68 billion in 2014. Europe is also catching on, the total European alternative finance market, grew by 92% to reach €5.43 billion in 2015.

There is no need to ask what will be the Uber of banking. The Uber of banking is Uber. 30% of Uber drivers in the US have never had a bank account, but is instead allowing drivers to easily register for a bank account (through integration to a bank partner) or prepaid card when

signing up to work for Uber, according to the documents. By doing so, drivers can be paid the same day they work instead of weekly or monthly. Effectively making Uber the fastest growing acquirer of small business accounts in the US.

This shows that industry boundaries are blurred in a digital world. The payment service M-Pesa by Vodaphone and Safaricom has 18 million customers and more than 80,000 agent outlets, financial services account for 9% of telecom operator Telenor's total revenue in Pakistan.

Customer expectations shaped by digital ecosystems differ from the traditional approach to digital marketing where the dominating logic has been to bring customers to the company's website or proprietary application platform.

"There is no need to ask what will be the Uber of banking. The Uber of banking is Uber."

*Christoffer O. Hernæs, S-Banken*

Citi research refers to this development as contextual commerce, where a technology/platform enables a consumer to interact and transact with their chosen merchant/brands in the consumers preferred context or medium.

New technology is shifting the centre of gravity for traditional core banking systems. A blockchain-based approach to core banking could act as a catalyst to fracture the monolithic and vertically integrated approach to core banking. A modular approach to lending, syndication, and capital markets could utilise blockchain to tie it all together. All the other elements of transactions management, the integrity of transactions, messaging, etc are inherent features of blockchain.

Banks cannot afford to ignore the internet of things (IoT). When machines are able to perform transactions with machines in real-time at a marginal cost basis, the concept of payments will become obsolete in many use cases as

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transactions become automated and integrated into other platforms and services. As paying for an Uber today is hidden for the end-customer, the self-driving car of tomorrow could perform payments to the charging station on its own behalf.

These trends all add up to the inevitability of open banking or banking as a platform.

However, open banking should be perceived as more than just a technical implementation. For banks to embrace open banking, incumbents need to also challenge internal culture and existing business models. Spanish bank BBVA has been a pioneer in this field together with

- Fidor, and banks like Capital One, ABN
- Amro and Nordea are all joining the open banking revolution. While

open banking may not be the silver bullet for reinventing banking industry, it represents a catalyst for change.

APIs are at the heart of open banking. If executed correctly propose to increase innovation, foster collaboration, extend customer reach and lower costs compared to existing legacy systems.

A key concept in the open banking paradigm is to use open source technologies to enable third-party developers to build financial applications on top of the banks' existing infrastructure.

This will most likely spark fears of becoming a commodity and giving away the customer interface for many bankers and may seem like the banks will be relegated to the back seat while third-party technology companies are driving the car.

When I started working in banking, my job was to prevent that from happening. Now I am strongly advocating that if the customer wants it, the back seat is probably the best place for banks as long as it is done willingly. After all, there is a vast difference between choosing to chill out in the back seat and being forced to.

With this, I wish to go more in-depth of the key concepts of open banking in the next series of posts covering various topics related to open banking.

## THE NATURE OF DIGITAL ECOSYSTEMS

It is impossible to address the subject of open banking without looking at the nature of digital ecosystems. While regulatory changes may act as a catalyst for open banking, the growth and nature of digital ecosystems are in my opinion the primary driving force behind the open banking paradigm.

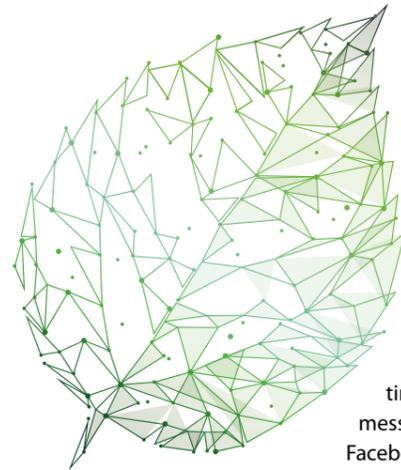
The banking industry is facing many of the same perils as the telco and media industry has been through in the latter years, and the primary challengers are the same ones that have been feasting at the media and telco's profit margins for more than a decade. These are the four horsemen of the incumbent's apocalypse – GAFA. While they are vastly different in many ways, they all share the traits of a successful digital ecosystem.

Every digital ecosystem starts out as a digital platform, and according to World Economic Forum, the platform economy is expected to disrupt all, or certainly, most existing industrial sectors while stimulating the birth of many new ones.

According to Irving Wladawsky-Berger of MIT, a platform or complement strategy differs from a product strategy in that it requires an external ecosystem to generate complementary product or service innovations and build positive feedback between the complements and the platform.

The effect is much greater potential for innovation and growth than a single product-oriented firm can generate

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alone. Scale increases the value of a digital ecosystem, helping it attract more complementary offerings, which in turn brings in more users and increase the value of the ecosystem. A successful digital ecosystem manages to repeat this process.

Napster may have challenged the status quo for the record industry, but it was neither the .mp3 file-format nor the iPod that disrupted the physical music distribution. It was when Apple created a seamless digital ecosystem for digital music consumption through iTunes things started to change. However, as the world progresses, yesterday's innovations become today's museum pieces, and streaming is already rendering digital music download obsolete.

So far, Spotify is excelling at this game, and one of the reasons is its ability to utilise big data analytics and social connections to create a unique personalised listening experience. The ability to create collaborative playlists and connect with your friends through Facebook gives Spotify a competitive advantage over competing services by leveraging third party access to Facebook's digital ecosystem.

Facebook stands out as one of the foremost examples of a well-executed digital ecosystem. Starting out as a social network, Facebook has evolved to a digital ecosystem and something similar to an operating system for your digital identity.

Facebook has probably realised this a long time ago and allows a fragmentation

of the front-end by leaving both Instagram and WhatsApp as separate applications.

When it comes to user engagement, Facebook's reigns supreme above all others. WhatsApp has exceeded one billion users, and Facebook Messenger also reports more than a billion users, handling 60 billion messages a day combined – three times the number of traditional text messages. The result is a separation of Facebook Messenger from the Facebook content platform as a separate platform.

A digital ecosystems horizontal integration should also include customers, partners and third-party services. Facebook caters to brands and agencies that wish to take advantage of Facebook's vast user penetration through Atlas and Pages Manager.

At the same time, Facebook allows third-party developers to create apps and

services through Facebook for developers for the Facebook content platform as well as encouraging everyone to create third-party apps as chatbots on the Messenger platform. Allowing co-creation and open innovation, while ensuring data collection through Facebook Connect.

Amazon recently updated its API Gateway service to include Usage Plans. Usage Plans allow Amazon API Gateway customers to regulate and monetise their own APIs through different levels of access and different categories of users. In addition, Amazon also opened up Alexa's APIs.

An important trait by successful digital ecosystems is their ability to cater to third parties as well as platform owners. Had it not been for the existence of such ubiquitous platforms as Android and iOS as well as Google Maps for its core functionality in addition to Google Play and Apple's App Store for distribution it is difficult to imagine how Pokémon Go

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could have achieved the scale and success we witnessed earlier this year.

A successful digital ecosystem is often based on a core engine or business model. However, as the external environment is changing, so has the centre of gravity for digital ecosystems pivoted accordingly?

iTunes reigned supreme as the centre of Apple's ecosystem, but the iPhone required another core engine. This transition birthed the app store as the new core in Apple's digital ecosystem. Google has gone through the same evolution from AdWords and AdSense to the Android platform with Google Play as the centre for third party engagement.

Amazon has also successfully pivoted from the traditional marketplace as core to Amazon Web Services (AWS), which is now Amazon's most profitable segment.

Facebook is still rooted in the user's digital identity, however, acknowledging shifting user behaviour and increasing focus on the Messenger platform.

When facing disruptive innovations, digital ecosystems are powerful offensive tools. It was not the iPhone who killed Nokia, it was the app store. In the age of digital ecosystems, it is important to find one's position. I strongly discourage attempting to be Google if you are not Google.

#### INTRODUCTION TO APIS

To fully grasp the business potential of open banking, it is useful to have some insights into the technical concepts defining the open banking paradigm. This is meant to be a short introduction to APIs for non-technical people. There are over 12,000 APIs offered by firms today.

Salesforce generates 50% of its revenue through APIs; Expedia generates 90%, and eBay 60%.

An API is in its simplest form a standardised protocol for computer programmes to talk to each other and is integral to modern software development.

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The use of APIs range from web-based APIs, operating systems, databases, hardware, or software libraries.

An API specifies the connection mechanism, the data, and functionality that are made available and what rules other pieces of software need to follow to interact with this data and functionality. Although have been used to link software components within an organisation along, the internet has given rise to the popularity of external web-based or public APIs. An organisation can use a public API to allow third parties to access their data or services in a controlled environment.

Using an API means that only desired aspects of software functionality are exposed, while the rest of the application remains protected. A Facebook “like” on a third party website and an embedded YouTube video are typical examples of the use of public APIs.

In addition to the examples mentioned above, companies such as Google, Apple and Facebook have created their digital ecosystems through the use of public APIs. By allowing third parties to add functionality to their core offering, these companies become platforms for third-party innovation.

Besides driving revenue, it also shortens time to market through crowdsourcing and >>

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co-creation of new products and services, as well as service customer, needs through customer demand-driven development.

Euro Banking Association (EBA) has made a useful overview of the contents of common technical standards in today's APIs:

■ **Data transmission** – the way the data is transmitted securely.

Almost all APIs use HTTP/HTTPS as a transport layer because it is simple and widely compatible, although there are APIs, which can be used over a wider variety of transport protocols.

■ **Data exchange** – the format of the exchanged data.

The most common formats are XML and JSON. While XML has slightly more functionality than JSON, the latter is winning in popularity. JSON can be used for most purposes and is less detailed, thus allows for faster exchange and is considered better machine-readable. Some companies offer their APIs in both formats, whilst others only have one format available.

■ **Data access** – access management (who gets access to which data and how is this achieved).

There are multiple standards for this; popular ones are SAML and OAuth 2.0. The first is an XML-based framework and is widely used in business-to-business interfacing. OAuth is a framework that originated in the consumer web services world.

■ **API design** – the way APIs are designed.

Common standardised design principles for APIs are REST (Representational State Transfer) and SOAP (Simple Object Access Protocol). REST is currently more popular due to its focus on solving issues related to performance, scalability, modifiability, portability, and reliability. Although SOAP is still popular in enterprise environments, it is considered more complex to implement.

APIs allow technology to evolve exponentially and each company to focus on its own developments, integrating whichever services or data it lacks through the most appropriate API supplier in each case. As an example, about 75% of mobile apps resort to some type of internal API to offer information or features to its users.

When it comes to APIs, the level of openness determines potential reach.

■ **Private APIs**

Private APIs are closed APIs, and therefore exclusively accessible by parties within the boundaries of the organisation. By definition, these are not considered "Open APIs" in this information paper.

■ **Partner APIs**

APIs that are open to selected partners based on bilateral agreements. Like Private APIs, Partner APIs are exclusively accessible at the discretion of the provider of the APIs. Bilateral agreements on specific data exchanges between for instance a bank and an enterprise resource planning (ERP) software provider is an example of a Partner API.

■ **Member APIs**

This type of API is open to everyone who is a formal member of a community with a

well-defined set of membership rules. When becoming a member of such a community the API provider allows access to the community members who comply with community membership rules and regulations.

Future PSD2-mandated account information and payment initiation services fall into this category as only authorised or registered third party providers (TPPs) can obtain access.

■ **Acquaintance APIs**

This type of Open APIs is inclusive, as they are open to every- one complying with a predefined set of requirements. Developer portals distribute this type of API, which also comes with some form of standardised agreements.

Merchant access to point-of-sale (POS) APIs is an example in this category.

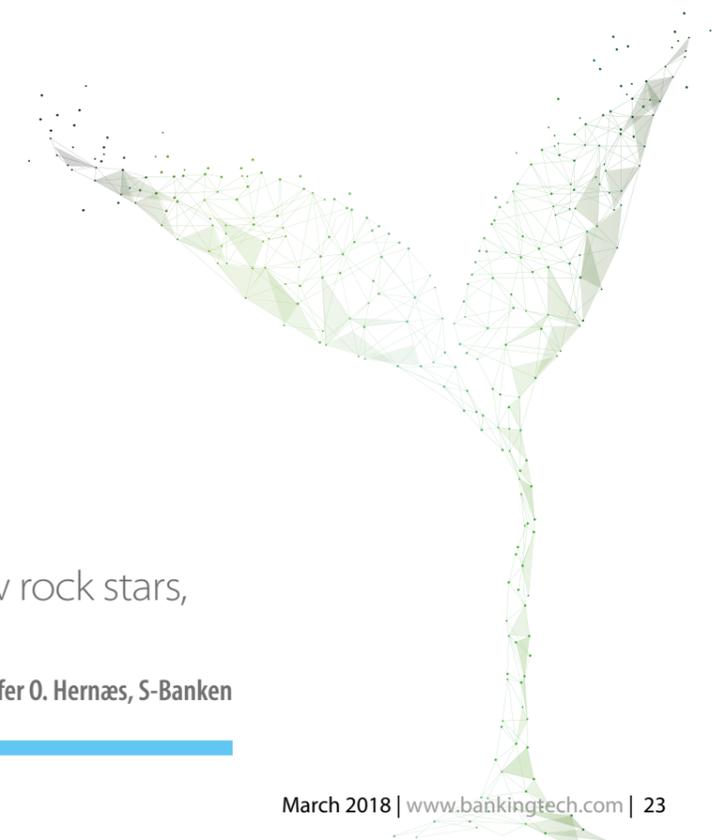
■ **Public APIs**

Public APIs are inclusive and can thus be accessed by anyone, typically with some form of registration for identification and authentication purposes.

As software continues its march to transform all industries, lack of connectivity increasingly equates to being broken. If software developers are the new rock stars, then APIs are the instruments. >>

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**GETTING THE BUSINESS MODEL RIGHT**

APIs are at the heart of open banking. If executed correctly propose to increase innovation, foster collaboration, extend customer reach and lower costs compared to existing legacy systems. A key concept in the open banking paradigm is to enable third-party developers to build financial applications on top of the banks' existing infrastructure.

To succeed with an open banking strategy without rendering oneself obsolete, finding the right business model is imperative.

For banks considering opening their infrastructure, an API strategy should be considered a business strategy, not an IT strategy. Giving away API access free may drive brand loyalty and allow the API provider to enter new channels, but may prove unsustainable over time. If executed properly, free API access may act as a stepping-stone for both direct and indirect business models.

**Data exchange** is one of the most common API models and is the core of Facebook's Graph API. For banks pursuing a data-based business model, the rule of thumb is to create a two-way data feed where you receive data every time third parties consume the API.

**Transaction-based models** are perhaps the most familiar one for banks, and does not differ much from traditional transaction banking services. The main difference in an API context is the way companies like PayPal and Stripe allows third parties to integrate and utilise their services through plug and play APIs, thus reaching out to a broader audience and driving payment volumes.

**Charge by call** is the most straightforward monetisation model, where third parties pay each time a service offered through the API is called. To succeed with this model, your services need to offer a clear value proposition. Before setting up direct monetisation models, you should talk to your customers to see if they would be willing to pay for these services and for how much.

As an example, the default price per API query for IBM Watson is \$0.0025.

**Subscription-based pricing** for API access could both be fixed or dynamic. A fixed model is straightforward and offers full API access for a fixed monthly cost.

A "pay as you go" approach is more dynamic, where pricing is determined

by metered usage. For example, a cloud computing platform's usage price could be determined by the operating system platform and size of a platform on an hourly basis.

Another dynamic subscription model is a tiered model. Developers sign up for and pay for a particular usage tier based on the number API calls over a fixed time. While the cost increases per tier the cost per API, call usually drops.

Vertical resources uses the tiered business model. Prices drop with consuming more volume (API calls), so after analysing usage over a period, users can adjust their tier.

**Freemium** is a great way to get started for both API owners and third parties curious to connect and explore and could serve as a stepping-stone towards both subscription-based models as well as charge by API call.

In this, model companies offer developers some of their APIs capabilities free and then charge for additional functionality.

For example, a web mapping service could allow a low number of calls to be made to the API free and then any additional calls to

"No matter which model you choose, it all comes down to profitability. One way to measure, the success of your APIs is a simple average revenue per user model (ARPU) to see if an API strategy is worth your while."

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the API are charged. Adding additional API access to a premium subscription offers a strong motivator to upgrade to a higher package, as it allows end users to customise their experience and workflow more easily.

**Balance sheet** is an important strategic resource for banks opening their APIs to third parties. Many fintechs are seeking bank partners to provide core financial infrastructure for new products and services.

This could benefit banks by increasing assets under management, providing deposits for capital requirements as well as the potential for additional interest margins if credit is involved.

**Revenue sharing** is an option to encourage open innovation and co-creation with third parties. In this model, it is often the third party who is paid based on the popularity of the third party application. A revenue-sharing model offers shared incentives for both API owner and third-party community and should also provide additional scaling incentives.

No matter which model you choose, it all comes down to profitability. One way to measure, the success of your APIs is a simple average revenue per user model (ARPU) to see if an API strategy is worth your while.

Finally, yet importantly, the business model must be aligned with the long-term vision and strategic agenda.

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## A PLAYBOOK FOR BANKS AND FINTECHS

After looking into the subject, it is becoming clear that there is no one size fits all open banking strategy. Rather, several tactical moves are being played out by a variety of both banks and fintechs.

To conclude this guide to open banking, I will attempt to describe some of the widely applied moves, as well as give some examples of the type of players that are conducting these moves.

### Move #1 The API marketplace

Becoming a fintech app store is for many banks the preferred alternative to open but, but still maintain control over customer relationship and customer data.

BBVA pioneered this move through their API marketplace and has seen several followers.

Nordea has recently launched a fully functioning developer portal and community hub as the first iteration of their open banking strategy. The move makes Nordea one of the first movers in the Nordics to openly state their Open Banking vision.

This is not limited to big banks, as Starling is launching an API marketplace of their own. Starling's public API enables third parties to access customer data and build on top of the Starling Platform to create products and services such as chatbots, spending analytics, or connections with the IoT.

### Move #2 The account aggregators

The ability to create a unified overview of your bank accounts is for many ones of the key strategic possibilities under the XS2A rule in PSD2.

This move needs no further elaboration, as we already see examples of players like Swedish fintech-startup Tink attempting to gain an early position through "screen scraping" prior to PSD2.

To succeed in this game, a contextually relevant user experience is crucial, and merely presenting aggregated account balances in a retrospective fashion will not make the cut.

As the directive is implemented, this is likely to become the new normal for every online and mobile banking service out there, effectively shifting focus for banks from attempting to be your customer's

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main or only bank towards attempting to be your customer's favourite bank.

### Move #3 The independent advisor

Building on the account aggregator, the trusted financial advisor also includes data from other sources such as rewards and loyalty points, utility bills, insurance, total cost of car ownership. The ability to give a holistic view of everyday finances will further strengthen the customer relationship.

Op Financial Group in Finland is following this strategy, and has launched an electric car leasing service. Players seeking to follow this move should also be prepared to include competing products and services from competitors if these are the best solutions for the customer in order to build and maintain trust.

### Move #4 Cross-industry collaboration

Hana Financial and SK Telecom in South Korea have formed a joint venture with the goal of developing a mobile financial services

platform. The joint venture is aiming to combine SK Telecom's mobile technologies and big data analytics with Hana Financial Group's experience in financial products and mobile financial services to build an open fintech ecosystem. When launched, the platform will offer a variety of mobile financial services – such as payments, remittance and asset management through a single mobile app.

Norwegian banks and Telenor previously attempted to collaborate on the mobile payment platform Valyou, as well as Polish bank mBank has launched a mobile banking services directed at SMEs in collaboration with Orange.

### Move #5 Hackathons/crowdsourcing

Opening up and allowing approved third parties to build innovative solutions on top of various banks APIs has become a popular choice to test the waters before moving towards the open banking deep end. However, hackathons can also be used beyond simple exploration. ICICI Bank in India is now hosting its second season of their "appathon". The mobile app

development initiative offers access of over 250 diverse APIs from ICICI Bank, IBM Bluemix, Visa and National Payments Council of India (NPCI) to the participants.

The programme aims to create the next generation of banking applications on mobile and web space by attracting developers, technology companies, startups, technopreneurs and students across the globe.

### Move #6 Bank/fintech collaboration

Almost every open banking initiative has some element for fintech/bank collaboration. To distinguish this as a separate move, I am specifically addressing bilateral collaboration efforts between one single bank and one fintech.

BBVA and Dollar collaborate on payments; USAA works with Coinbase to include cryptocurrencies in its product offerings.

In the Nordics, among the latest developments is a tie-up between Nordea and fintech-startup Spiff, which aims to make savings fun and easy.

### Move #7 Banking-as-a-Service (BaaS)

For many incumbent banks, the idea of becoming a wholesale provider of commodity utilities is considered a worst-case scenario. However, this is absolutely a viable strategic option for some.

Germany-based Solaris Bank was the first to provide a fully licensed banking

platform aimed at fintechs. The platform offers payments, transaction services, deposit and credit services, as well as compliance and KYC/AML solutions.

Privatbank in Ukraine is offering a similar service through the Corezoid process engine. Railsbank in the UK is another banking as a service player that provides fintech companies a range of wholesale banking services, including IBANs, receiving money, sending money, converting money, direct debit, issuing cards, and managing credit through APIs.

### Move #8 The white label product vendor

Similar to providing the whole bank as a service, some banks and fintechs have collaborated with a bank as a silent white label provider of products and services that often require a banking licence to deliver.

Notable examples include Webbank in Utah issuing loans for P2P lenders like LendingClub and Prosper as well as providing lines of credit for Paypal. As a result, Webbank was able to generate a return on equity of 44% based on a profit base of only \$15,5 million.

CBW Bank was also an unknown bank out of Kansas before it was known as the initial bank partner for Moven.

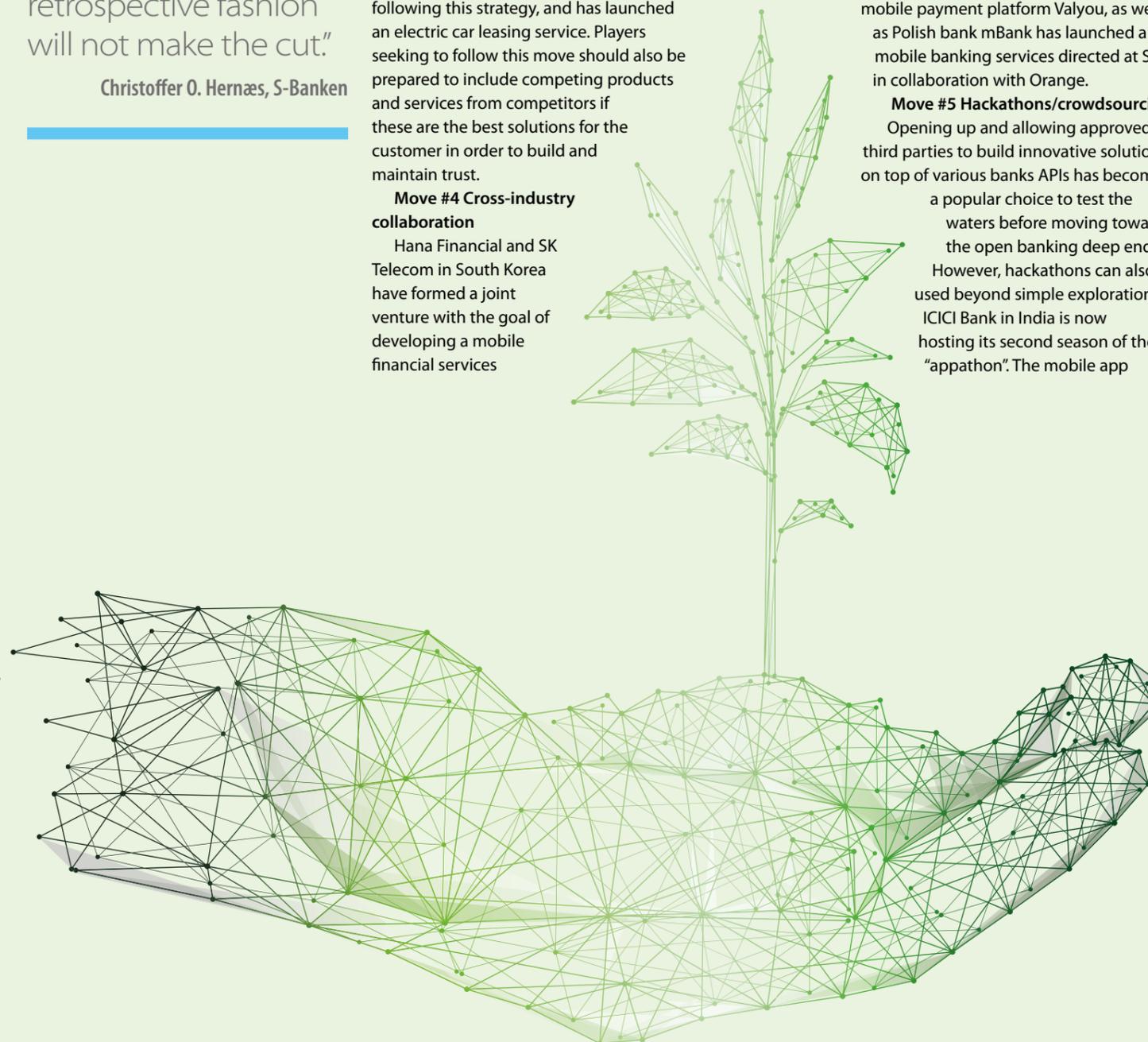
### Move #9 Openness at the core

To build an open, digital bank, legacy core banking systems are often pointed out as one of the key obstacles. These systems are closed and monolithic by nature, while open banking requires openness and real-time processing.

However, Thought Machine is building its core banking solution on a blockchain-style technology that is said to be ideal for interfacing with open banks.

Meanwhile, another core banking software vendor, Temenos, has also established a marketplace to connect fintech providers to financial institutions using Temenos banking software.

No matter which strategic option(s) you choose to follow, open banking will fundamentally change banking the same way internet banking once did. As banks become integrated parts of digital ecosystems, the distribution of banking products will change and in the end become more valuable in the right context for the end customer. **bt**



"For many incumbent banks, the idea of becoming a wholesale provider of commodity utilities is considered a worst-case scenario. However, this is absolutely a viable strategic option for some."

Christoffer O. Hernæs, S-Banken



# Mission to Mars: or how I manage to make everything about fintech

By *Leda Glyptis*

I don't know if you have been following the debate on whether Elon Musk should have spent his money eradicating homelessness in the US instead of going into space...

It seems to get some folks mightily worked up and on some level I can see why. But here is why I don't agree: there is this one scene, in the West Wing (because everything you need to know in life including every smart thing I have ever said in the workplace, is found in one slick box set).

In this scene a public school teacher corners the White House operative – Malory to Sam Seabourne, for the Faithful among us. And the episode is Galileo. And no didn't need to check that, if you think that's sad I guess we will never be friends.

So the teacher turns on the representative and defender of a decision to invest in space exploration, asking why would you spend money we desperately need elsewhere to explore space. Why would you not put the money in education, healthcare, crumbling essential services.

And this fictional character gave the most compelling answer I have ever heard.

Because it's next.

Because it is the thing we don't yet fully understand, arrived at through the understanding of things that were once also Unknown. And that is what humans do. Or at least that is what we aspire to, on a good day.

We can't all go to space. I am claustrophobic and terrified of heights. Nobody wants me in that capsule with them. Also, having read *The Martian*, I realise I have zero survival skills. Leave me on Earth when the time comes, my heart will soar with you.

"We all work in breaking down the frontier of what was thought possible, we all work towards ending information asymmetry and enabling financial access."

*Leda Glyptis*

We don't have to go into space to allow the momentousness to mean something.

And since I have the uncanny – and deeply boring, as party tricks go – ability to make absolutely everything about fintech, here is what doing right by humanity looks like, sitting at our desks.

**YOU CAN'T EAT ABSTRACTION,  
BUT YOU CAN'T BUILD WITHOUT A  
DREAM AND YOU WON'T EAT IF YOU  
DON'T BUILD**

If Elon Musk eradicated homelessness in America, as the twitterverse suggested, instead of investing in space exploration, there would still be homeless people in the

rest of the world and there would soon be new homeless people in America, runaways and people all out of luck falling between the cracks. There is no definitive solution, only societies pulling together and weighing decency against prosperity again and again.

Pushing the boundaries of human knowledge feeds nobody. But it serves the whole of humanity. It makes us all smarter, humbler, better able to reflect, collaborate and act. It shows what conquering the recently impossible looks like. It creates a ripple effect of energy. It makes people believe. And faith makes people act.

When we choose to act nothing is out reach, not even eradicating homelessness.

If only we could keep our eye trained of just how much is possible and how much else would be possible if we tried to make it so.

In our tiny and occasionally immensely self-referential fintech-verse, we don't all work on financial inclusion. We don't all work on financial literacy. We don't all work on identity assets and security. But we all work in breaking down the frontier of what was thought possible, we all work

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*Leda Glyptis*

towards ending information asymmetry and enabling financial access. We don't all directly do good, but we all collectively push the world towards connectedness, transparency, accountability.

Even those of us working for the big boys are empowering the little guys with every single thing we do, in ways big and small. It's not glamorous, but it's impactful. And every now and again we get our own Mission to Mars moment – allowing the unbanked farm labourer to access credit, enabling the migrant labourer to keep more of their hard earned cash while sending help home, making everyone more financially literate and less afraid of the authority behind the bank.

We get that moment that reminds us "better" is possible. And we are part of it.

**WE GO FORTH KNOWING NOT WHAT  
WE SHALL FIND**

A lot of time and money, a lot of planning and a lot of heart has gone into this mission. I don't know that for a fact but I know it implicitly. >>

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“Not being funny here, we just fired a rocket to Mars. Are you really telling me you will chicken out from going to the board for the ninth time to push for that coveted green light for whatever small rebellion you are plotting?”

Leda Glyptis

I know how much bleeding effort it takes to get an analytics pilot approved in a global bank so, by any measure, the toil that goes into these forays into the unknown is huge. Resources, time, money and talent are committed and frustrated in the pursuit of an answer that may be unsatisfactory. And that is OK, because the only thing worse than not knowing, is not trying to find out.

Not being funny here, we just fired a rocket to Mars. Are you really telling me you will chicken out from going to the board for the ninth time to push for that coveted green light for whatever small rebellion you are plotting?

It's not big. But it's next. And you are behind the wheel. So drive.

### CHANGING THE WORLD MAY NOT CHANGE YOUR LIFE

I read an article recently about how Elon Musk's net worth or indeed his holdings' financial performance are not the right metric of success when it comes to assessing the impact of the truly transformational businessman who is not just catering to a bottom line but is actually, time and again, changing the world.

And this is not “flash in a pan”, blip-swallowed-by-entropy change. This is a real transformational paradigm shift: before and after stuff. So what if it doesn't make money?

In Elon Musk's case it is making money. And yet I will challenge anyone who suggests that even his more commercial projects were driven by return on investment (ROI) calculations.

Plus, in our little fintech arena, the point holds true in stark and painful ways. The vast majority of the thinkers and workers and innovators who bring transformative

ideas to life in fintech, will never be millionaires. If unicorns are hard to find, as an investor, they are even harder to build. The vast majority of people who will push the boundaries of our understanding in fintech, will never make money out of it. They will inspire transformative regulation, radical shifts in our relationship with money and those who safeguard it for us, but they will not necessarily win big in the process.

Some of the most inspiring technologists and business founders I have met, people who made me pause and go “oh my. That changes everything” either through something they built or through their ability to look at the same world as me and see something different and by seeing it, and calling it out, allowing both themselves and me to think about changing it... These guys are not rich.

They have changed the world. And my life. But not theirs.

And the truth is we have not been entirely honest with all the founders and entrepreneurs we have lured into the FinTech arena with seed capital and accelerators, incubators and startup challenges. We haven't

quite told them the truth. At least not the whole truth. It is true: we expect them to change the world. We expect them to blow our minds and show us what is next. We both expect them to be able to do so and we are ready for it to happen.

However, we haven't quite admitted that, what may be in it for them, beyond the toil, is more a matter of chance than a matter of the thing they build actually working. We haven't told them that they are guaranteed to change the world but that may not change their lives. Companies will fail. Day jobs may need to be sought out afresh.

And yet, listening to the language of human-centric egalitarianism, openness and interdependency that characterises the entrepreneurial half of the fintech circus, it doesn't seem to matter.

They know.

And they are carrying us all forward because it is next and that is what humans do. On a good day.

Some will make money in the process and change their lives. Collectively they are all changing the world. And us with it. **bt**



Leda Glyptis is *FinTech Futures'* new resident thought provocateur – she leads, writes on, lives and breathes transformation and digital disruption.

Leda is a lapsed academic and long-term resident of the banking ecosystem, inhabiting both start-ups and banks over the years. She is a roaming banker and all-weather geek.

All opinions are her own. You can't have them – but you are welcome to debate and comment!

Follow Leda on Twitter @LedaGlyptis and visit our website for more of her articles.

# Industry alignment or industry confusion: what is a financial institution?

By *Richard Buckle*, founder and CEO of Pyalla Technologies

For as long as I can recall there have been presentations on commerce that always featured the classification of companies within industries that have led to graphics made up of “boxes” into which it was very easy to position any business.

Back then, it was easy to say one company was in transportation and another in insurance. It was easy too to simply look at the company name to know what business it was in – such names as NEWS, FedEx, Xerox, Kleenex became household names and all told a story that wasn’t confusing. However, today it is becoming increasingly clear that industry labels and market segment boxes that are so familiar to us are no longer telling us anything at all about where a company may be headed!

Turning to the pages of one of my best sources for story lines pertaining to financial institutions, *Car and Driver*, the January 2018 issue features comparison tests as the editors sought to identify the ten best cars for 2018.

When comparing Mercedes Benz to Audi to BMW, “it hasn’t been long since the three luxury automakers’ portfolios were as distinct from one another as the numerous different types of German sausages,” one commentator wrote. “But now confusion reigns throughout the realm as the three, intent on grabbing market share, mount hostile raids into one another’s territories.”

When it comes to tech companies, retailers and banks much the same can be said today. There was a time not so long ago when a tech company making software was as different from one making hardware as they both were from bricks-and-mortar main street banks or shopping

mall retailers. They were, within their type, every bit “as distinct from one another as the numerous different types of German sausages”.

When it comes to financial institutions including banks and fintechs, confusion too is beginning to reign. Reading the insights of one financial analyst or another, posting to the media, it is clear too that the lines separating once very distinctly different industries have become fuzzy and every bit as confusing.

Is Amazon a retailer or a tech company? Is Apple a bank? And what of Walmart – is it on a course to become all three? One agency that is catching on to the transformation is the European Union (EU) where just a few weeks ago, “the EU’s top court has ruled that Uber should be

regulated like a taxi company,” wrote *The Vox*, an online news agency. “The court rejected Uber’s argument that it is a tech business whose main function is matching passengers with drivers. Instead, it ruled that the company should be classified as a transportation service – and that it needs to be regulated like one.”

According to *The Guardian*, “Uber had denied it was a transport company, arguing instead it was a computer services business with operations that should be subject to an EU directive governing e-commerce and prohibiting restrictions on the establishment of such organisations.”

Perhaps the EU isn’t alone in coming to terms with the confusion that is developing, but then again, bridging the worlds of tech and banking, for instance,

“Bridging the worlds of tech and banking, for instance, are fintechs that are opening the door to more and more tech companies just as are retailers who introduced online shopping and e-commerce opened the doors to tech companies.”

**Richard Buckle, Pyalla Technologies**

are fintechs that are opening the door to more and more tech companies just as are retailers who introduced online shopping and e-commerce opened the doors to tech companies. And there is no confusion when it comes to e-commerce players, like Amazon, as they morph into tech companies.

The only question remaining is whether we truly need separation or well-defined boxes to define a business anymore. Obviously, there has been a plethora of regulatory bodies created to oversee the performance of those businesses inside the boxes and they will feel threatened with change, but are they really the only excuse we have for the boxes?

By chance I happened to be corresponding with Yash Kapadia, CEO of payment solutions vendor OmniPayments, who recalled that even among tech companies, the boxes existed. “You had very different business models for those selling products versus those selling service,” said Kapadia.

“You also had big differences between those vendors who were selling software versus those selling hardware. But today, those traditional lines are blurring as well. IBM still sells some hardware but not as much as it once did and now, it is more commonly associated with software – Watson is, of course, artificial intelligence (AI) and is mostly software. And yes, to be more specific, Amazon isn’t just software but really

“The only question remaining is whether we truly need separation or well-defined boxes to define a business anymore.”

**Richard Buckle, Pyalla Technologies**

a services company and its cloud services operation is more akin to selling time on a service bureau than anything else.”

This is probably not the first post that has been written about fuzzy lines and the growing meaninglessness of boxes and the very fact that the morphing of well-known industries into something none of us could have anticipated taking place just a decade or so ago is really not surprising. Technology is changing everything – the speed with which fintechs have penetrated traditional banking businesses really shouldn’t shock anyone who has seen technology at work for banks.

The broader categorisation of financial institutions is neither surprising nor confusing, but rather an opportunity. To vendors like OmniPayments, it’s a godsend in many ways as the companies needing to process payments and any other type of financial transaction – traditional, virtualised, on-premise or in the cloud – is going to broaden right along with the tearing down of the borders that defined the box.

Yes, retailers are becoming tech companies just as tech companies are becoming banks and while brands may have little in common with practices, it isn’t a bad thing. While the dilution of brands may be breaking down the barriers that once categorised automobiles and hence, may not be a good thing for the consumer, the realignment that we see taking place across industries that once had only a casual relationship with financial institutions is a very positive outcome that can be directly traced back to technology.

There will be unintended consequences, naturally, as some financial institutions fail to realise the upside benefits and will miss the opportunity to bring new financial products to market, but overall, the more industries morph and overlap and add-value to their relationships with their customers, the better.

And take it from me, as I promise such confluence and the positive outcomes that flow from it, is something that you can well, *drive* to the bank! **bt**



# Look on the bright side

Letshego, an African microfinance provider, has innovated to introduce an agency-based model that leverages mobile and fingerprint recognition technology to support inclusive banking in remote communities. *Caren Robb*, deputy group MD and head of strategy and transformation, tells Letshego's story.

Letshego means support and in a literal sense it's the tripod that supports a cooking pot. In a figurative sense, however, the business aims to support and grow financial inclusion through its savings and borrowing solutions.

"The group's inclusive finance agenda is focused on providing underserved customers with access to simple, appropriate and accessible financial solutions," says Robb.



Photography: Letshego



The company was started in 1998 and now has a market cap of \$500 million. It is operational in 11 countries of which six have deposit-taking licences (Mozambique, Nigeria, Tanzania, Namibia, Ghana and Rwanda).

Its remit is to provide short to medium-term secured and unsecured loans to employees in the public, quasi-public, and private sectors. It also provides loans to micro and small entities.

"The loans we offer are fairly priced and tend to be between \$500 and \$60,000 depending on what the money is to be used for. We use the deduction at source model for simplicity," says Robb.

But in the past four years with the acquisition of specialist regional skills under Chris Low's leadership (Letshego's group MD), the company is making strong progress in diversifying the business into a more inclusive finance model, where both micro businesses and a broader range of individuals can benefit from financial inclusion solutions on offer.

"This is something that receives a lot of lip service on the continent but has yet to gain real traction and scalability. This is the company's aim," says Robb. "We describe our mission as 'delivering inclusivity based around simple and appropriate financial solutions that can be delivered sustainably,'" she says.

Indeed, an International Finance Corporation (IFC, part of the World Bank) report said that: "Over three billion people in developing countries are still without effective access to loan and deposit services. The problem is particularly acute in Sub-Saharan Africa, where only between 5% and 25% of households have a formal relationship with a financial institution. The region is also home to just 2% of the world's microfinance institutions."

Although the report dates back to 2009, little seems to have changed since then.

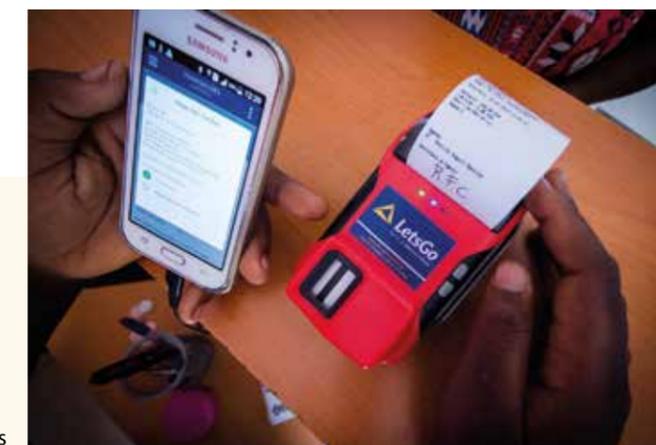
Around this holistic inclusivity theme then, the company looks firstly to provide finance around the home; be that building materials, labour, utilities or insurance.

Education is the second focus. Robb explains: "We provide both lending and savings facilities to schools; schools' finances tend to work in their termly tranches rather than monthly and having something that can support this cycle is responsive to their cashflow needs. Teachers too need to transact and put their salary somewhere and there is a funding need for books and uniforms."

The recent launch of the Edu Solutions loan product in Uganda is a typical example. It is designed to provide financial support to players in the education value chain. "It is a product packaged for school owners, staff, students, suppliers, parents and guardians with a wide range of solutions including asset financing, salary loans, school fees loans, microfinance loans and set up loans," Robb says.

The third tranche is responding to the very many micro businesses that exist on the continent and their need for finance.

To meet this demand, Letshego diversified its offering in 2012 through the acquisition of Micro Africa Limited in East Africa – providing loans to micro and small entrepreneurs (MSEs), collective groups as well as to low and middle income earners. The MSE portfolio continues to steadily grow – as at December 2016, the total microfinance book stood at \$71 million.



"The group's inclusive finance agenda is focused on providing underserved customers with access to simple, appropriate and accessible financial solutions."

Caren Robb, Letshego

## BLUE BOX

But the biggest news for the company is the use of technology to provide an agency banking model that is led by savings rather than lending. "This has been successfully introduced with good take-up in Mozambique," says Robb.

The LetsGo BlueBox agency banking model, which is the firm's rural inclusive banking access project, is in partnership with Financial Sector Deepening Mozambique (FSDMoç), a programme funded by DFID-UK Department for International Development.

"What we have set out to do is increase the levels of access and use of financial >>>



solutions in Mozambique. We're doing this by offering financial services to rural communities supported by solar and biometric technologies," she says.

Blue Box agents are visible along Maputo's main commuter corridors using the slogan "pay and be paid".

"This has been rolled out to small agents such as the business owner running the car wash or the local general store – places that people go to on a day-to-day basis."

Robb says that the whole key to this working has been getting the technology right.

"With better mobile networks now in place then the reliability and security of the network has been a key enabler. Agents can now sign people up and the entire process takes no more than three or four minutes with the aim being that the service, using the technology now available, is informal, accessible and based somewhere that the customer would visit routinely anyway."

#### BUT HOW DOES IT WORK?

Robb explains: "The BlueBox 'pack' includes a combination of tablet and smart mobile phone. They come pre-loaded with our financial services software so that our agents can biometrically authenticate customers for onboarding and account opening.

"As most BlueBox agents are found beyond the realms of formal infrastructure, the BlueBox includes a solar panel to not only power the smart device, but also enable the agent to earn extra income by offering charging resources for customers' phones or devices!"

Further to this, she says, the agents using the LetsGo BlueBox can provide customers with financial education on how to operate simple savings and transactional accounts via a mobile (\$) platform.

The Blue Box also includes a small printer, which confirms a customer's account or transaction with a printed receipt as well as a text. The mobile app also enables a

The Blue Box agency model has secured third-party recognition and support from The Mastercard Foundation. Through this innovation award, the group has earned over \$1 million to support and facilitate its roll-out of this digital delivery channel.

customer to sign in using their finger on the phone or tablet, the digital signature is automatically printed on the receipt as well as a digital copy stored with Letshego for audit and security purposes.

The technology uses fingerprint recognition to validate identity – this is a small biometric reader, which uses Bluetooth technology to connect to the mobile app on the Android phone. The app runs entirely online and the fingerprints are automatically authenticated against the Letshego database of customers.

"Again this is easy to use, secure and provides a good level of customer experience," comments Robb.

"Along the way the agencies have provided feedback – such as in one pilot project in Mozambique a large amount of the customer base were cotton farmers who, due to the nature of their work, often have worn fingerprints. Nonetheless being paid in cash they have a real need to deposit and save and thus facial recognition technology is to be introduced to serve this customer base. This needs further refinement," she adds.

Agents have two SIM cards within their phones so that they can maintain connectivity at all times. No information is stored within the device itself, but rather is securely passed between the mobile app and Letshego's data centre.

"The app has been built in such a way that it demands minimum data to be passed between the device and our back-

end systems – this is vital in areas of poor or intermittent connectivity, common in most emerging economies," says Robb.

The agency banking application that is hosted on the back end connects to Letshego's TCS Bancs core banking system, provided by TCS Financial Solutions. The customer data is also maintained within the core banking system and it is able to generate a significant amount of data and information on customers which ensures adherence to the regulatory requirements as well as enables the firm to continuously improve its customer experience.

"Collecting this data means that the firm can run analytics to identify what constitutes a 'good' customer. It also helps with liquidity management and making sure that agents have the right amount of cash available when they need it," notes Robb.

#### AGENT SUPPORT

Another key consideration is the training and support given to agents themselves. Here it is all about finding the right structure for commissions to agents, and ensuring commissions for single transactions and multiple transactions remain fair for both agent and customer.

"A happy agent is essential in driving the behaviour likely to provide positive customer experience and drive growth of the proposition. So far, agents have proven capable when dealing with the



Caren Robb, Letshego

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"As most BlueBox agents are found beyond the realms of formal infrastructure, the BlueBox includes a solar panel to not only power the smart device, but also enable the agent to earn extra income by offering charging resources for customers' phones or devices!"

Caren Robb, Letshego



routine, especially given the agency attracts customers to their existing business, thus increasing foot traffic.

"We've learnt a lot from our pilot on servicing our customers such as when a customer doesn't have the right ID or a non-standard ID or other anomalies that can prove problematic. We've found that in this instance providing increased training in this area has improved service to our customers," Robb explains.

Letshego's Blue Box is working well within Mozambique and the company has been approached by several regulators in other countries within Letshego's 11 country footprint, who are interested in its use in their own countries.

"Like an innovative digital system, the Blue Box will continue to evolve and improve as Letshego analyses data flow, as well as gathers direct feedback from the agents and customers which use this tool on a daily basis," says Robb.

The aim is now to expand the transactional options to these remote communities. "The central offering for Blue Box is the LetsGo account. Once the deposit taking aspect of this all-in-one account has gained more transaction, then

we'll look to include borrowing solutions in addition to the savings account solutions in place."

In effect, this agency model and the availability of a reliable mobile service brings "the banking branch" to the people, where they live and operate daily, no matter how rural that location may be.

Research by CGAP – (Consultative Group to Assist the Poor) shows that lack of access to a reliable mobile network means that communications are often disrupted and this is a significant reason why so many people are still financially excluded, most especially women.

In Mozambique, for example, the nearest ATM can often be over 200 kilometres away and it is common to send one person from a village with the cards of up to 50 people to withdraw money each week.

"The core message is financial inclusion promotes financial wellness, and we are well-placed and enthusiastic about leveraging our digital platforms and strategic partnerships across Africa to expand the reach of productive financial services in Africa," concludes Robb. **bt**

Alison Ebbage

# Switch on with soul

Richard Sunley, UK analyst at Talkwalker, examines how the bank of tomorrow engages its customers today.

A modern bank's customer proposition depends on a data driven approach designed for early adopting, millennial professionals. That's why such banks are so rich in apps, artificial intelligence (AI), biometrics, facial and voice recognition.

In the UK, the most modern banks of all, such as Metro, Atom and Monzo are unencumbered by legacy systems, or opening hours. Metro reports a 46% year on year rise in customers while RBS reports online and mobile transactions increased by more than 400%, with branch transactions dropping by 43% since 2010.

All well and good? Not necessarily. The problem with shrinking branch networks

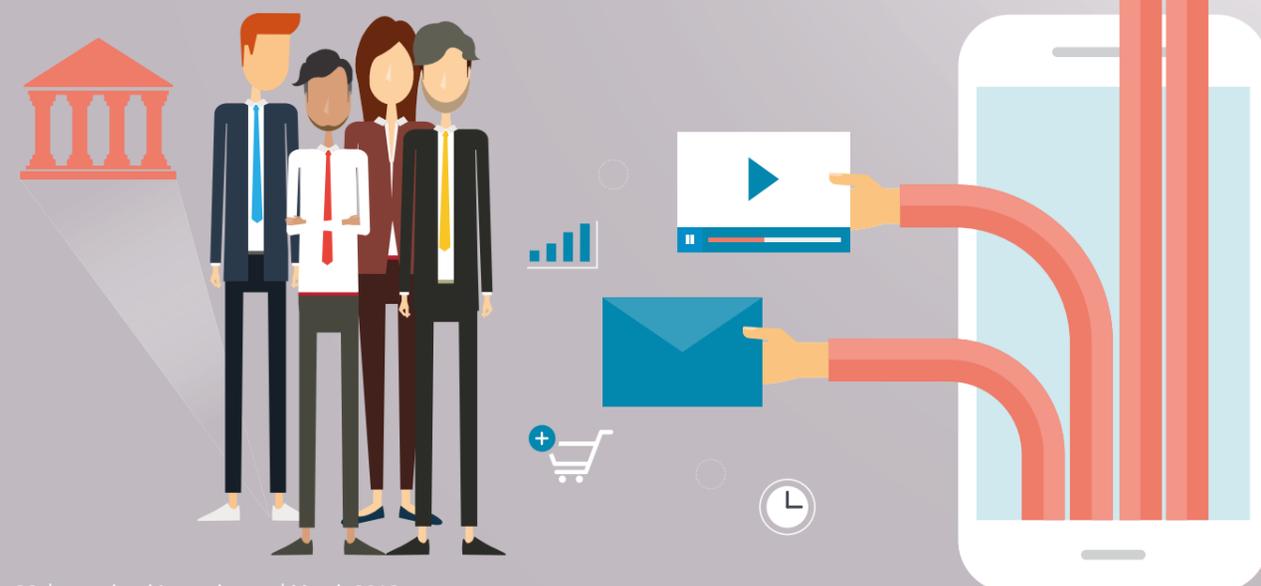
is that they provide correspondingly shrinking opportunities for human contact. In remaining branches, self service machines are now replacing counter staff. Upsell is limited to leaflets at the till. While the UK's biggest four banks still manage 77% of UK current accounts, according to KPMG, a lacklustre customer experience cost them £3.7 billion between 2015 and 2018.

Empathy is future proof. Apps aren't.

In the absence of such human interaction, tomorrow's banks don't rely solely on the same charmless apps used by their competitors. Customers might be enabled to open an account with no

"Empathy is future proof. Apps aren't."

Richard Sunley, Talkwalker



human intervention, but that does mean they want to. Customer centricity comes from acting on the data the app pulls in, rather than its ability to perform faultless transactions. That is how customer centricity provides future proof empathy, and competitive advantage. Digitised personalisation offers a wealth of new touchpoint that enable new levels of customer connectivity, but the data it delivers must be fed back to those able to intervene, collate, extrapolate and share it.

Possibly the biggest and most dynamic source of data today comes from social

media. Driven by new technology and shifting demographics, it is exploding with potential and opportunity.

These are the most engaging UK banks, as measured by the frequency with which they tweet, the responsiveness they generate and the positive sentiment they receive:

Top ten UK banks on Twitter in 2017 (by the number of tweets):

1. HSBC UK 46,325
2. TSB 36,446
3. Monzo 28,252
4. Lloyds Bank 25,264
5. Starling Bank 15,333
6. Revolut 14,139
7. Virgin Money 12,999
8. Nationwide 11,019
9. Metro Bank 9,239
10. Halifax 9,225

What works best for established banks differs from what works best for the challengers. High levels of engagement for challengers, for instance, come from people wanting to be involved in their evolution rather than from any particularly successful social strategy.

Revolut for instance, scored highly with discussion about its EU banking licence, on both Twitter and Facebook. The validation of their project prompted a wave of support from fans who wanted to recognise a key step in their development.

Monzo, Revolut and Starling in particular focus more on driving traffic to

their own websites than on finding more creative ways of generating engagement. Monzo uses far less visual content than traditional banks, especially HSBC and TSB, with an emphasis on company announcements and products, balanced with a greater use of emojis. Starling engages with updates to apps and news regarding the growth of the company.

Challenger banks put a greater emphasis on their products, but might benefit by experimenting with video and greater associations with complimentary brands with strong social skills, amplifying their social standing. That's the favoured strategy of the traditional banks, which focus less on products and more on affiliations.

Instead of focusing more on their brand reputation and customer announcements than on product news and customer acquisition, opportunity for challengers would also come from balancing the partner strategy with greater product focus.

Traditional banks, conversely, might benefit from less of a product focus and new ways of driving interaction. Among established players, Lloyds stands out for its less "corporate" tone, veered more towards the informality of social media, though a greater use of fun/emojis would help broaden that appeal across social media's core user group.

TSB's Pride of Britain campaign stands out for its success across all social channels, and for sparking the highest spike in mentions among all banking brands in 2017. Their forensic focus on the campaign succeeded partly thanks to a high use of visual content. TSB also led the way on Facebook, this time by securing three out of five of the top Facebook postings of any bank with their Pride campaign.

HSBC also makes much of visual content, for instance in uploading its TV ads onto social media. Their sponsorship strategy with Wimbledon and rugby and support of Dementia Week was highly effective, contributing the majority of their tweets.

Unlike other banks, Lloyds has made good use of their Twitter moments feature focusing on methods of saving money. (See image 1 and 2.)



Richard Sunley, Talkwalker

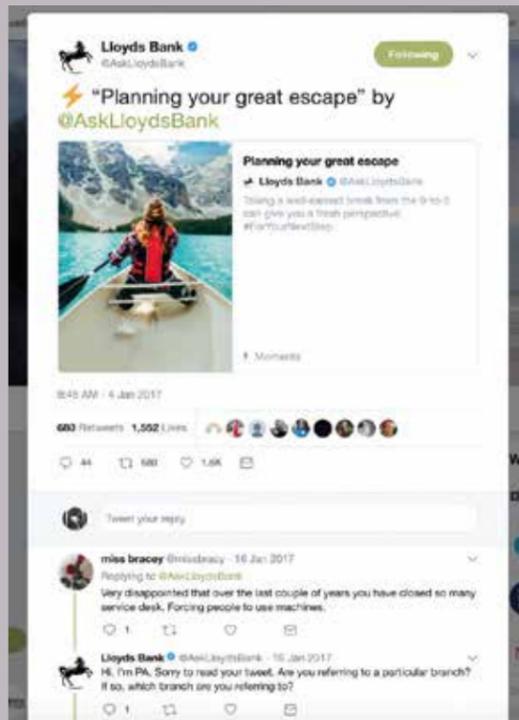


Image 1

“For traditional and modern banks alike, the days of playing it safe on social media are over.”

Richard Sunley, Talkwalker

Overall, established banks lead the way on Facebook, which differs from Twitter in several important ways. Twitter is particularly strong for live events and building momentum for viral posts thanks to the accessibility of its network. Everyone can see everything and can connect with whoever they please. Facebook, by contrast is more private and benefits from having a huge user base and relatively effective paid options for promoting content. The sponsorship strategy works well on both channels, though Facebook leads the field in its role as information source, so controversies such as surrounding fraud warnings attract significantly larger engagement here than on other social channels.

We see five key areas in which banks' digital marketers can expect the biggest changes. In social video, Facebook is becoming a major competitor to YouTube, with new features for video creators that make it easier to be discovered. This will boost preferential Facebook News Feed exposure for original native video, drive generous revenue share deals and the

eventual roll-out of a dedicated video app.

At the same time, AI-powered chatbots are seizing the customer conversation. Forrester and Gartner call it Conversational UI (User Interface). Chatbots are the missing link between scalable social, lead nurturing and sales. It is still primal, but Amazon Echo/Alexa and innovations by Apple, Google and Microsoft will make an enormous difference. 2018 will be the year of the out-of-the-box chatbot solutions.

Rich media formats (video, AR) are already enabling more immersive shopping experiences across earned, owned and paid social media, closing the gap between engagement and purchase, with calls to action that pop-up when customers scroll or tap different items in an image or video. At the same time, we see a new desire to engage. “Creators” are creating narrative based opportunities for marketers to boost retention through batched production, sponsorship and the

creation of loyal communities who tune into your latest instalment every week.

This year will also bring the end to free visibility via social media as networks push brands to pay for eyeballs. Social media managers have seen this coming with Facebook in particular squeezing the reach of organic or non-paid social media content over the last year.

Finally, advocacy marketing are becoming increasingly influential in propelling brands into a new digital age by leveraging the power of online employee, partner and customer communities. Advocacy marketing will increasingly see the customer stepping into a brand advocate role with product or service reviews and recommendations that drive leads and increase sales. Brand success will come from listening to the influencers, who know their fans and their audiences better than the marketers.

For traditional and modern banks alike, the days of playing it safe on social media are over. The race is on. With digitisation becoming the norm, traditional and challenger banks can compete on equal terms, each using scientific analysis to measure the success of their interactions, ensuring that the process of digitised personalisation does not alienate more customers than it attracts. **bt**



## People before profit

A new challenger bank is coming to the UK – Fiinu. It says it “wants to change the financial services industry and improve the lives of millions of people”.

“Most of us have negative experiences with traditional banks and 80% of us agree that these banks put profit before people. Fiinu wants to build a new bank which puts people before profit,” it states.

“Whenever Fiinu sees a failure in the financial services market, it will try to solve it through the innovative use of technology. Fiinu has set a target of saving consumers £1 billion annually within five years.”

The bank has developed an automated lending robot, Fiinuscore, which, combined with PSD2 and Open Banking will be able to provide “small overdrafts to millions of people within the payday loan price cap”.

The technology, such as artificial intelligence (AI), machine learning, robotics and blockchain, will enable Fiinu to operate a high-volume, low-margins lending model and “be more efficient and cost-effective than any other traditional bank in the world today”.

The latest technology and high level of automation – and hence lower operational

costs – will enable the bank “to undercut the current market and increase fairness in the banking market by providing better services at more affordable fees”.

Fiinu estimates it is able to acquire customers with just one tenth of the traditional banks' acquisition costs.

Fiinu describes its monetisation strategy as the “Walmart of Banking”.

It will lend its fixed long-term depositors' savings on a very short-term basis to consumers. The bank will

spearhead its operations with lending, but will also make money from packaged accounts, FX and cryptocurrency trading, card usage and international transfer fees.

In terms of its target market, it believes it will be “particularly appealing” to millennials and young adults, and consumers with lower credit scores.

Fiinu will also target the wealthier segment with its savings accounts and cryptocurrency offerings.

“All of Fiinu's products result in better customer outcomes,” it states.

The bank launched a Seedrs funding round in mid-February this year and aims to open for business in early 2019. It says it is already more than halfway through the Bank of England authorisation process.

In terms of technology, it will be a combination of in-house development and purchased software. **bt**

Tanya Andreasyan

### FOUNDER AND CEO

Marko Sjoblom is Fiinu's founder and chief executive. He says increasing financial inclusion in the retail banking space is a personal mission for him. He grew up in a very poor working-class family, without running water, living financially from week-to-week, and thus experienced first-hand the impact of families needing to regularly use the most expensive types of credit.

Sjoblom has previously built an overdraft-style lending business, including a robot, which has now lent and recovered over four million loans in the UK.

He has seed funded Fiinu since inception.

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## Movers and shakers

Conversational AI platform for banks **Clinic** hired technology executive **Helen Yu** as its chief growth officer.

Yu comes to Clinic from marketing software Marketo, where she served as group VP.

Describing Yu's talents as "hard to find", Clinic's CEO, Dr Jason Mars, praises the former Hyperion, Oracle and Adobe executive's "tremendous knowledge, extensive experience and track record of transforming organisations".

Another AI-powered virtual assistant for personal banking and finance, **Finn.ai**, has nabbed ex-Twitter exec, **Stephen Morse**, as commercial head of global strategic accounts, based in New York.

At Twitter, Morse was head of global finance data partnerships. Previously, he ran the New York City office of Gnip, a big data/API technology firm that was ultimately acquired by Twitter.

Digital currency wallet **Blockchain** has appointed **Marco Santori** as president and chief legal officer. The role of president was formerly held by Blockchain's co-founder, **Nicolas Cary**, who has now assumed the role of vice-chairman.

Santori moves from Cooley LLP, where he worked as a partner, leading the law firm's global fintech practice.

He is also an advisor to the International Monetary Fund (IMF) and the blockchain ambassador for the US state of Delaware.

**Matt Quinn**, CTO at integration and analytics tech vendor **Tibco**, has relinquished the role to **Nelson Petracek**. Quinn, who's been with Tibco since 1997 (initially as a developer), has now become COO.

In his new role, he'll oversee the Tibco Connected Intelligence Cloud, which the company is keen to "ramp up".

Petracek, who is also a Tibco veteran, transitions to CTO after leading the Strategic Enablement Group, which focused on innovative technologies such as low-code applications, blockchain, and natural language processing.

**Tyler Aveni** has joined the **WeBank** products and innovation team in Shenzhen. He moves from SuperCharger Fintech Accelerator, where he was country director for Malaysia for a year and a half.

"I could not be more excited to help establish better, faster, and more inclusive banking in China and beyond," Aveni writes on LinkedIn.

**Shailesh Grover** has left Capco after a one-year stint to join Malaysia's **Hong Leong Bank** as chief digital and innovation officer. At Capco, he was partner, digital, APAC and India. Prior to that, he had a long career at Barclays.

**Bank of Ireland** has hired a former National Australia Bank (NAB) exec to lead the bank's €900 million tech overhaul programme (aka Project Omega), **Steve Collier**. Collier was previously in charge of a similar large-scale tech transformation at NAB, from 2009 to 2017.

**Maureen Stanley**, who has been interim programme director since last June, will now return to her role as group head of integrated planning.

Bank of Ireland hired a new group CEO last year, Francesca McDonagh, who put the project – which centres on the core banking system replacement – under review. Whilst it is hoped to considerably reduce the bank's IT costs, nearly 1,000 job losses are expected (nearly 9% of the bank's workforce) due to higher automation.

Cloud-based banking tech vendor **nCino** has appointed **Spencer Lake** to its board of directors. Lake moves from HSBC, where he spent ten years, most recently as vice-chairman of global banking and markets.

Prior to HSBC, Lake spent 17 years at Merrill Lynch in New York, Hong Kong and London.

**Rob Bernstein** is new CFO of **RegTek Solutions**, a control and compliance software provider for global trade and transaction reporting.

Bernstein moves from TIM Group where he was CFO for seven years. **bt**

## EVENTS CALENDAR

### April

12-13: **Global Banking Innovation Forum & Expo, Prague**  
[uni-global.eu/portfolio-page/10th-global-banking-innovation-forum](http://uni-global.eu/portfolio-page/10th-global-banking-innovation-forum)

17-18: **Fraud and Financial Crime Europe, London**  
[cefpro.com/forthcoming-events/fraud-and-financial-crime-europe](http://cefpro.com/forthcoming-events/fraud-and-financial-crime-europe)

23-24: **RegTech MENA, Dubai**  
[www.regtechmena.com](http://www.regtechmena.com)

24-25: **7th Annual Risk EMEA, London**  
[cefpro.com/forthcoming-events/risk-emea](http://cefpro.com/forthcoming-events/risk-emea)

25-26: **TradeTech, Paris**  
[tradetecheu.wbresearch.com](http://tradetecheu.wbresearch.com)

### May

3-4: **Seamless Asia**  
[www.terrapinn.com/exhibition/seamless](http://www.terrapinn.com/exhibition/seamless)

8-11: **FinovateSpring**  
[finance.knect365.com/finovatespring](http://finance.knect365.com/finovatespring)

8: **CPPO Prepaid Symposium 2018, Toronto**  
[cpo.ca/prepaid-symposium](http://cpo.ca/prepaid-symposium)

### June

13: **TSAM New York**  
[www.tsamnewyork.com](http://www.tsamnewyork.com)

25-26: **MoneyLIVE: Digital Banking**  
[new.marketforce.eu.com/money-live/event/digital-banking-2018](http://new.marketforce.eu.com/money-live/event/digital-banking-2018)

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# Out of office

## “Misery” for fintech journalist kidnapped by PR exec

In an uncanny resemblance to Stephen King’s novel “Misery”, a fintech journalist was seized and forced to write a jargon-saturated report by a PR exec.

Earnest Evergreen, reporter at the UK-based fantasy/fintech hybrid publication Dungeons & Plugins – and still wearing the same cheap suit from his Amsterdam adventure – was driving from London to visit his parents’ home in Sussex when the bizarre encounter occurred.

Evergreen, in a noble effort to avoid a deer, careered off an isolated country road and into a large tree. The leafy leviathan proved victorious in the metallic versus botanic duel, leaving the young man with a broken leg – and dazed and confused. Ironically, the Led Zeppelin song “Dazed and Confused” was playing on the radio at the time of impact.

In a strange twist of fate, aka a plot device, a PR exec, Annie Wilkinson, heard the noise from her home and dragged Evergreen to safety.

After emerging from his semi-unconscious state, Evergreen found himself bedridden and confronted by Wilkinson. She eyed him curiously.

“I know you,” she said.

“Sorry?”

“You’re Earnest Evergreen, the reporter and fintech event lover. I’m Annie Wilkinson from the PR agency Thunderbirds Argot. I am your number one fan! I often send you press releases, but you never publish them.”

“Ah... I remember now. I recall one story on a new sales manager that contained so much jargon I lost the will to live. Sorry, I had other priorities – such as real news.”

Unused to direct feedback, Wilkinson flew into a rage at such audacious talk.

“YOU DIRTY BIRDY! HOW COULD YOU? I WANT THE SPIRIT OF JARGON! I WANT IT!”

Evergreen was aghast. Clearly this lady was under immense pressure from her boss to get free advertising masquerading as news published.

“I thought you were good, Earnest, but you’re not good, you’re just a lying ol’ dirty birdy,” she said.

With that, she stormed off and brought her laptop back.

Wilkinson screamed: “You will write the story I want. You will use ‘compelling,’ ‘cutting edge’ and ‘leading’ in every sentence. DO IT OR YOU’LL NEVER LEAVE THIS HOUSE!”

Evergreen, unable to move due to his broken leg, and the small fact he had been tied up, seemed to have no alternative. Cold sweat formed on his forehead as the keys clattered. The creation of drivel was his only route to survival.

Meanwhile, his parents, perturbed by their errant son, had contacted the police. The understaffed officers, weighed down by health and safety rules, told them to wait a bit longer – their son was bound to turn up later.

With the UK police as useful as a chocolate teapot, the parents turned to people who can do something. And quickly. A phone call to Clarissa Cordite and Stefan Silversmith, Evergreen’s MD and editor respectively, was made.

The duo, united by a history of ruthless ambition and love of misanthropic reveries, leapt into action. No time for lengthy meetings. Just get on with it.

They wanted their reporter back! Not for altruistic reasons but because someone had to write the news reports they despised doing.

For the pair used to investigative work, it was easy to trace Evergreen’s route. They located his crappy red Fiat embedded in a smug looking tree. Lights in the distance indicated a home and the first place to call upon.

Wilkinson answered the door feigning ignorance. Sadly, her acting skills were on par with the abysmal TV show Hollyoaks, and Cordite and Silversmith sensed a crock of lies. They’ve had plenty of practice. Journalists soon get used to hearing mendacity from all and sundry.

Whilst talking to Wilkinson, they also spotted an awful looking suit jacket on a coat rack. It was Evergreen’s and he must be somewhere inside.

Cordite and Silversmith pretended to be convinced by the weak politician-like excuses and walked away. After a suitable break they decided stealth was the best recourse. They would enter the house and rescue Evergreen. Welcome to 2018 folks, where many British people need to take the law into their own hands.

In a daring operation, made easier by Wilkinson’s soporific state from watching a reality TV show, they extricated Evergreen.

The youthful soul was returned to his grateful parents. Cordite and Silversmith returned to London, annoyed yet again by the antics of Evergreen.

What happened to Wilkinson? Well, there was no point in pressing charges against her as the police are far too busy to solve crimes.

She’s alive and well... and probably on the phone as you read this – asking a journalist if they received the email she sent 20 minutes ago. The misery never ends. **bt**

*Antony Peyton*

## Smarter banknote processing

Increased productivity and greater cash center flexibility can only be achieved with innovative technologies, automated banknote processing and advanced connectivity. G+D Currency Technology has developed two new systems for improving efficiency: the BPS C2 and the BPS M3.

There are currently around 500 billion banknotes in circulation; despite various cashless payment options, the global quantity of cash is rising. This means innovative cash processing technologies and services will be needed in future; however, they will need to be more efficient, and adapt to new trends and user requirements. Flexible specialist solutions like the new BPS C2 and BPS M3 from G+D Currency Technology are key to efficient automated banknote processing. They are custom-fit, powerful, and their cost-efficiency is truly impressive.

### BPS C2 – SMALL SIZE, MAXIMUM PERFORMANCE

The compact BPS C2 for back offices in bank branches, cash-in-transit companies and casinos, uses cutting-edge sensor technology for the precise recognition of banknote authenticity and fitness – at a consistently high speed: throughput of 1,050 banknotes per minute supports high productivity during counting, authentication, and sorting, as well as

Both systems show that deploying state-of-the-art technology on the basis of many years’ experience makes all the difference in banknote processing. Today, this is the only way to achieve what users want: productivity gain through automation.

the reading of serial numbers. The BPS C2 can also be flexibly adjusted to suit the customer’s preferred application.

With two output compartments and one reject compartment, the BPS C2-2 is outstandingly suited to fast, interruption-free and reliable accounting, and also offers many different sorting options.

### BPS M3 – COST-EFFICIENT AND PRODUCTIVE

The BPS M3 is a high-performance banknote processing system for commercial cash centers. Its range of functions has been optimized for core functionality. “With the BPS M3, we have clearly concentrated on maximum productivity and deliberately eliminating

comfort features,” explains Carmine Grabandt, Business Development Director at G+D Currency Technology. The result is a powerful system with all the advantages of the BPS M segment, such as continual operation at high throughput, and a long service life with excellent cost-efficiency.

Up to 76,000 banknotes per hour can be checked for value and authenticity, and simultaneously sorted based on defined criteria, such as denomination, fitness for circulation, or orientation.

For further information, details and contact, please visit:

[gi-de.com/ct](http://gi-de.com/ct)



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