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CHARITIES AND CONTACTLESS PAYMENTS

Goodwill and giving digitally

CASE STUDY: TSB BANK Casting off the chains of legacy tech

EMBARKING ON A EMBARK

It's a big project with an aspirational happy ending; functioning as intended, on budget and on time. It's even potentially career enhancing for those in charge.

Defining and implementing processing rules, control consoles and reports are usually the easier part of the project. It's the technical challenges presented by both internal and external systems integration work that extends the time scales, and can escalate costs alarmingly.

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Judith McInerney

Clarification: Kevin Keegan is not part of the team



banking technology

2017, WHAT A YEAR!

Alec Gost

Looking back at the past 12 months, Banking Technology's story has been dynamic and rewarding.

Our team has expanded (spot the new faces!), we have introduced a shiny new website, the Banking Technology Awards have seen a record high number of entries, we've merged with global paytech publication Paybefore, and our digital and print readership went through the roof.

All of this wouldn't be possible without you, our loyal supporters who read our publications and engage with us on social media.

So, we would like to take this opportunity to thank you for being a part of our journey and wish you a very Merry Christmas and Happy New Year!

May 2018 be peaceful, successful, positive and kind.

We will continue to bring you the breaking news, latest updates, happenings, analysis and gossip from across the global industry.

Wishing you a lovely festive break,

Banking Technology team

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Onalytica's **TOP 100** Fintech Influencer and Brand

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Get your act together, incumbent banks! This is my recent exasperating

experience of getting a mortgage with a major high street bank, which also happens to be my provider of the current account and credit card. Following a lengthy conversation with the bank's mortgage advisor (the process felt more like a tick-box exercise for the bank) and masses of printed paperwork, the bank contacted me asking to provide the address information for the last three years.

Me: You have been my main bank for over a decade, and you've been sending me my bank statements and other correspondence regularly by post - are you saying you do not have my current address or address history? Bank: Ah, yes, we do.

A couple of days later, I get another phone call about the deposit for the mortgage. It was in a savings account with this bank until two years ago, when I moved it to another bank as it offered a better deal.

Bank: Could you please send us the paperwork showing where the money was moved from your current savings account with Bank X?

Me: It was moved from a savings account that I had with you to a savings account with Bank X, so you have all this information on your records.

Bank: Can you log into your internet banking account, find those statements



Editor's note

and send them to us? It will be faster.

Me: Are you serious? You want me to download the PDFs of monthly statements from two years ago, search through them to find the right one, and then send it to you? All the while you are my main bank holding all this data already.

Bank: Ah, that's ok, we'll find the information.

And they did.

Is this really how business should be done today, especially in the light of everincreasing competition from old and new players? The time to get into the modern age of tech and customer centricity is long overdue, and the era of big banks domination is coming to an end.

Let's make 2018 the year of modernisation and change.

Let it be a dynamic, interesting, and inspiring year! **b**t



Tanya Andreasyan Editor Banking Technology

All aboard the Amex blockchain payments express



American Express has launched blockchain-enabled, business-to-business cross-border payments with Santander using Ripple's network.

The Amex FX International Payments (FXIP) business is working with Ripple to make blockchain payments commercially available, "reducing the time and cost of settlement". Santander UK is the selected partner to initiate this new transaction channel

Marc Gordon, EVP and CIO at American Express, says the deal "represents the next step forward on our blockchain journey, evolving the way we move money around the world".

With the integration of Ripple into the FXIP platform, non-card payments can be routed through Ripple's real-time payment network, known as RippleNet.

Initially, Ripple will connect Amex's customers to Santander in the UK, providing "instant", trackable, crossborder payments. RippleNet is helping remittances from Amex customers in the US to reach UK bank accounts "faster" through Santander.

Moreover, Ripple's payments network has the "capability to allow American Express to connect with customers across the globe".

Earlier this year, Amex joined the Hyperledger Project, an open source project intended to advance blockchain digital technology for recording and verifying transactions.

American Express will contribute code and engineers and joins more than 100 members, including IBM and JP Morgan Chase.

Antony Peyton

China CITIC Bank and Baidu launch direct bank, AiBank

China's internet giant Baidu and one of the country's largest lenders, China CITIC Bank, have joined forces to launch a new direct bank, AiBank.

The joint venture was approved by the regulator earlier this year, and has now opened its virtual doors for business (it has an online presence only, and no physical branches).

China CITIC Bank owns 70% of AiBank, while Baidu owns 30%.

According to Li Rudong, AiBank's president, the start-up's main focus will be on consumer and SME lending. It will leverage modern technologies such as artificial intelligence (AI) and big data, Rudong says. Technology plays a big part in AiBank,

with 60% of the bank's employees working in tech roles. Baidu's COO, Lu Qi, describes AiBank as "the future of intelligent finance".

Tanya Andreasyan

Airtel Payments Bank live with new core banking system

Airtel Payments Bank, a start-up subsidiary of Indian telco Airtel, has gone live with its core banking system. This is understood to be Infosys' Finacle.

The new platform went live after "after a few tense moments", according to Airtel's global chief HR officer, Srikanth Balachandran. It was "a moment of joy and celebration for the 300-odd people at Airtel Payments Bank", he writes in a LinkedIn post.

"Heralding the maturation of India's truly digital bank into a full-fledged financial institution, with all the system frameworks that power the transactions. Yet, clinging on to the soul of a start-up," he continues.

"A bank that has defied all traditional logic. No branches. No counters. To be a customer of Airtel Payments Bank, all you need is a mobile number!"

The bank opened for business in early 2017 and "has been adding millions of new customers month after month", Balachandran says.

"The volume and value of payments throughput have been galloping quarter after quarter."

It has recently launched the Unified Payment Interface (UPI), connecting to the new real-time payments system developed by the National Payments Corporation of India (NPCI, an arm of the country's government).

It has also entered into a strategic partnership with Hindustan Petroleum Corporation Limited (HPCL), turning HPCL's network of 14,000 petrol stations across the country into Airtel Payments Bank's banking points.

Customers can open a bank account "in a matter of minutes", Balachandran says.

The bank has rolled out an electronic know your customer (e-KYC) solution using the Aadhaar-powered biometric system. (Aadhaar is a 12-digit unique identity number issued to India's citizens.) Account holders are provided with a

virtual Mastercard debit card

"Airtel Payments Bank runs on digital technologies. Its systems are engineered for mobile banking," Balachandran states.

He adds that the bank leverages "the power of Airtel's telecom network fully", with the created ecosystem "capable of servicing every one of Airtel's 282 million customers in India".

"The digital capabilities are truly unmatched, and the technologies and tools deployed are leading edge by any standards in the banking and fintech worlds," he claims.

"The product and engineering teams are oozing creativity, while the sales and service folks are creating memorable moments for customers."

Tanya Andreasyan

Standard Chartered and Axis Bank launch payments via Ripple

payments are handled".

Standard Chartered and Axis Bank have unveiled a real-time cross-border payment service for corporates using Ripple's distributed ledger technology (DLT) solution.

This offering is now commercially available between Standard Chartered (Singapore) and Axis Bank India, and, accessible through Standard Chartered's corporate digital banking platform, Straight2Bank.

Himadri Chatterjee, president, transaction banking, Axis Bank, says by using APIs and DLT there is an "opportunity to radically change the way international

Itaú Unibanco in wealthtech revamp with Temenos

Itaú Unibanco, Latin America's largest banking group, has signed for a new core banking solution - Temenos' T24 - for its international private banking business.

The platform, marketed as WealthSuite by Temenos, also includes portfolio management, channels and analytics functions.

It will be deployed in the cloud, in a "big bang" approach.

Carlos Constantini, CEO of US and head of international private banking at Itaú, says the new platform will "enrich the customer experience, reduce time to market for new products, generate efficiencies and reinforce the segments' digital strategy".

Also, it will make the bank "better prepared for the exponential evolution of technological cycles", he adds. Earlier this year, another Latin American financial institution, LarrainVial, went live with T24 following a seven-year effort. Tanya Andreasyan

BNP Paribas in "global transformation" with Fenergo

Fenergo says its flagship Client Lifecycle Management (CLM) solution has been selected by BNP Paribas "as part of its global transformation project".

Fenergo's CLM solution "will deliver a single client view across all jurisdictions and entities".

In addition, it will enable the bank to comply with all local and global regulatory rules, the vendor says.

Bernard Gavgani, global head of CIB IT and operations at BNP Paribas, says Fenergo's tech was chosen for its "deep, out-of-the-box CLM functionality" and for being "a good fit" with the bank's own technology landscape.

its solution, v8, is built upon React - "the same technology that underpins highvolume, high-profile firms such as Netflix, Facebook, Instagram and the New York Times e-platforms".

sixth European client to be signed in the last six months.

The new service will see corporate payments in SGD to accounts in Axis Bank, India's third largest private sector bank. The banks say the service gives corporates "greater control over cash flow" as Ripple's network offers "full transparency of associated fees", which can be advised before transactions are executed. In addition, these payments are prevalidated, providing straight through processing and "fast settlement that lowers the overall cost of processing the payment while allowing for greater certainty".

Antony Peyton

Fenergo states the latest version of

The vendor adds that BNP Paribas is its

Tanya Andreasyan

Sunlight Payments shines brightly for philanthropy

Sunlight Payments, a US-based paytech start-up, says it has "successfully tested a new platform to enhance controls and accountability for philanthropic funding and grants".

The test was carried out with Pathfinder International, a women's reproductive health non-governmental organisation (NGO) that works in 19 countries. Sunlight says the NGO was selected as a pilot customer due to its "existing strong accounting systems".

The two companies used the new platform to transfer funds from the NGO's US office in Massachusetts to country offices in Tanzania and Uganda.

"Unlike traditional paper payment methods, the pilot electronically tracked the follow-on payments down the distribution chain to vendors and partners in local communities in each country," Sunlight explains."This approach allowed Pathfinder staff to have visibility into payments across all parties. Those participating in the pilot moved monies between the Sunlight platform and their bank accounts, in the currency of their choice."

Pathfinder's CFO, Linda DeNicola, says her team is "excited to see the enhanced controls and cost savings".

A team of payment, fraud detection and distributed systems specialists from KPMG, Deloitte and Amazon assisted with the platform development and testing.

Sunlight Payments' CTO, Eric Merritt, believes the new solution "will revolutionise the way payments are distributed to provide essential services in the field".

Sunlight is now ready to fully market its platform to philanthropic organisations worldwide.

The paytech firm is backed by an investment from Bill Gates. Bank of America Merrill Lynch (BAML) is its financial services provider: BAML's global transaction services division delivers the cross-currency payments products to Sunlight. The bank states it has been a strong supporter of Sunlight since its inception earlier this year.

Tanya Andreasyan

BBVA and Wave test blockchain-based trade transaction

BBVA, working in collaboration with Wave, performed the first blockchain-based international trade transaction between Europe and Latin America.

Built on distributed ledger technology (DLT) and blockchain, BBVA says it used Wave's solution to reduce the time required to send, verify and authorise an international trade transaction, which

generally takes from seven to ten days, to under three hours.

The pilot was run on a transaction between Mexico and Spain, in which Spain-based Frime bought 25 tons of frozen tuna from Pinsa Congelados in México. The payment was made using a letter of credit. BBVA Spain issued the credit, and BBVA Bancomer processed it.

To BBVA the pilot demonstrated the potential blockchain uses in the import/ export process.

The pilot focused on electronic document submission.

In the future, it could be applied to the final credit card payment and financing of the operations.

Calum Parry

PSD2 regulatory technical standards set for 2019

With PSD2 on its way in January next year, the European Commission has confirmed the deadline for its regulatory technical standards (RTS) will be around September 2019.

By way of recap, the security measures outlined in RTS stem from two key objectives of PSD2: "ensuring consumer protection and enhancing competition".

RTS introduces requirements that payment service providers (PSPs) "must" observe when they process payments or provide payment-related services.

In the context of competition and innovation, RTS includes two new types of services, the "so-called payment initiation services" and the account information services.

The Commission says it made some "limited substantive amendments" to the draft RTS submitted by the European Banking Authority (EBA). This was done to "better reflect the mandate of PSD2 and to provide further clarity and certainty to all interested parties".

STRONG CUSTOMER AUTHENTICATION

According to the EC, RTS makes strong customer authentication (SCA) the basis for accessing one's account, as well as for making payments online.

This means that to prove their identity users will have to provide at least two separate elements out of these three: something they know (a password or PIN code); something they own (a card, a mobile phone); and something they are (biometrics, e.g. fingerprint or iris scan).

All PSPs will need to prove the implementation, testing and auditing of the security measures. In case of a fraudulent payment, consumers will be entitled to a full reimbursement.

In addition, the EC says PSD2 establishes a framework for new services linked to consumer accounts, such as initiation services and account information services. In this context, RTS specifies the requirements for common and secure standards of communication between banks and fintech firms.

Consumers and companies will be able to grant access to their data to third parties providing payments-related services (TPPs). These are, for example, payment initiation services providers (PISPs) and account information service providers (AISPs). TPPs are sometimes fintech companies, but could also be other banks, according to the EC.

As reported in May, a group of fintech companies and associations were asking for changes to PSD2 due to fears it will force them to become technologically dependent on banks.

Banks can be exempted from setting up a fall-back mechanism if they put in place a "fully functional dedicated communication interface responding to the quality criteria defined by RTS". National authorities will grant the exemption to individual banks by national authorities, after having consulted the EBA.

SCREEN SCRAPING

In terms of the data TPPs can access and screen scraping, the EC explains that PSD2 prohibits TPPs from accessing any

other data from the customer account beyond those explicitly authorised by the customer.

With these new rules, it will no longer be allowed to access the customer's data through the use of the techniques of screen scraping. (Screen scraping means accessing the data through the customer interface with the use of the customer's security credentials. Through this, TPPs can access customer data without any further identification vis-à-vis the banks.)

Banks will have to put in place a communication channel that allows TPPs to access the data that they need in accordance with PSD2. The channel will also be used to enable banks and TPPs to identify each other when accessing these data. It will also allow them to communicate through secure messaging.

The RTS specifies the contingency safeguards that banks shall put in place if they decide to develop a dedicated interface.

There will be transition period between the application date of PSD2 and the application date of the RTS. The EC says market players need this transition period to upgrade their security systems so that they meet the RTS requirements.

PSD2 will become applicable as of 13 January 2018, except for the security measures outlined in the RTS. These will become applicable 18 months after the date of entry into force of the RTS. Subject to the agreement of the Council and the European Parliament the RTS is due to become applicable around September 2019.

Antony Peyton

First blockchain-based bancassurance network launched in Hong Kong

AIA Hong Kong, a subsidiary of pan-Asian life insurance group AIA, has launched a blockchain solution for bancassurance.

It was co-developed with AIA Hong Kong's bank partners, based on Hyperledger Fabric, and is the first instance of blockchain technology being deployed in a bancassurance partnership in Hong Kong.

"It enables AIA Hong Kong and its bank partners to share required policy data and documentation on a real-time basis, reducing the time needed to process insurance applications for our customers and increasing transparency throughout the entire business process," AIA Hong Kong explains.

Wanted: US-based bank for crypto-friendly fun

It wasn't spotted on Craigslist but here's an unusual request. If you are the owner of a small or medium-sized bank in the US and are ready to sell it completely (or partially) - you have a buyer!

Vladislav (aka Slava) Solodkiy, managing partner at venture capital (VC) firm Life.Sreda, is being refreshingly direct and telling it like it is. You can all learn from this, fintech folks!

Solodkiy plans to use the bank for his new project Arival, "the first crypto-friendly fintech bank".

Like many others, Arival will be a neo bank, and combined with other start-ups to provide a range of financial services. So, it's "not just an application and card". Always have a dig at your competitors. That's the first rule of fintech club.

Solodkiy says: "I want to buy a small bank, completely clear of the traditional business (to remove any conflict of interest), change the team, products, processes and technologies - and completely focus it on working with crypto fintech and blockchain start-ups, making the bank crypto-friendly."

Arival will target the SME sector and be built on the principle of open architecture "BAASIS" – a set of open APIs integrated into its own Blockchain-as-a-Service (BaaS) platform (including blockchain-based digital KYC - BAASIS ID).

It also runs the AIA Accelerator, seeking out "high potential start-ups" in the insurance/ insurtech space. The latest iteration, AIA Accelerator 4.0, was conducted earlier this year in partnership with KPMG Digital Village. Tanya Andreasyan

blockchain consortium.

According to Solodkiy, this will allow it to partner with third-party developers and integrate into the networks of banks. He adds: "There is no need to reinvent all fintech services once again – too many people have been doing this for the past five years! You simply need to help them to move to new rails, integrate them among themselves on the basis of your open architecture and business processes tailored for a new type of customers." Well, I think quite a few people may argue they have been doing the "new rails"

concept for a while.

Life.Sreda was established five years ago and its focus is "only on fintech". Previously based in Moscow, since 2015 it has been in Singapore.

It has invested in 22 start-ups (seven exits so far) in the US, UK, Germany, CIS, Singapore, Philippines, India and Vietnam. Some of the names include – Simple, Moven, Fidor Bank, Rocketbank, SumUp, Anthemis Group, Mobikon, and alternative credit score provider Lenddo. Life.Sreda has also launched a \$200

million VC fund, named Based on Blockchain or BB Fund. This will invest in companies by acquiring and holding equity and/or tokens.

Ip Man Kit, chief technology and operations officer of AIA Hong Kong and Macau, states the company "embraces and harnesses valueadded technology across our business to help people live longer, healthier and better lives, and strive to set new industry standards for ease of doing business with our customers." Last year, AIA Group joined the R3

Antony Peyton

Raiffeisen Switzerland sheds stake in Avaloq



Raiffeisen, the third largest banking group in Switzerland, is selling its 10% stake in core banking tech vendor Avalog to private equity firm Warburg Pincus. The latter already owns 35% of Avaloq (the acquisition was completed in mid-2017).

Raiffeisen and Avalog have been partners for over a decade. In early 2015, they set up a joint venture, Arizon, to build a retail banking platform for Swiss banks based on the Avalog Banking Suite core banking system.

Arizon is also responsible for implementing and operating the platform in all Raiffeisen banks (at the time of the project unveiling the number of banks was cited as 300, but in the latest announcement it has been revised to 255).

Later that year, Raiffeisen purchased 10% of Avalog's treasury shares, which have now been sold to Warburg Pincus.

The banking group is also disposing of its 51% stake in Arizon: an agreement in principle has been reached for Avaloq to take the full ownership of Arizon as of 1 January 2019. Avaloq says no management changes are anticipated and there will be no reductions in headcount (300 employees) as a result of the transaction.

As part of the deal, Arizon will enter into a service agreement with Raiffeisen running until the end of 2024 – "for the further development of the banking platform and delivery of processing service". Avalog confirms that 255 Raiffeisen banks will be migrated onto the new platform.

Avaloq describes the deal as "bolstering its existing partnership with Raiffeisen Switzerland into a value additive, long-term and pure client-supplier relationship".

Tanya Andreasyan

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Verifone

masterpass

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masterpass.

Alior Bank to launch fintech accelerator

Alior Bank has unveiled its acceleration programme for technology start-ups using the OpenAPI environment based on IBM technology, implemented by business solutions developer Tuatara.

With the mission to identify "innovative ideas" of technology start-ups, support them in the development of their business.

According to Alior Bank, it will select a group of start-ups for the accelerator whose ideas add value to its services.

The bank is seeking potential partners in Poland and Central and Eastern Europe as well as beyond.

Mariusz Ożga, Alior Bank's fintech director, says: "We believe that the project can build a bridge between the world of fintechs and Alior Bank which is open to ideas of others."

The bank says the innovation model relies on two units: its innovation centre for crowdsourcing within the bank, and the fintech department responsible for development with external partners, including the accelerator.

Both units will be in Warsaw, Poland and are scheduled to open in May 2018. Alior Bank says it wants to be Poland's first financial institution to offer a sandbox - a dedicated test environment for partners that will be open to third-party developers and fintechs to develop products to ensure compliance with the PSD2 requirements. IBM's API Connect meets the bank's technology requirements, it adds, and the platform will "accelerate" the prototyping, designing and alignment of solutions

before they are offered to clients.

Allianz accelerates to new digital investments

Allianz with its in-house incubator, Allianz X, has switched gears and pivoted towards a new range of digital investments.

Its new venture replaces its previous accelerator of company projects to focus on investments within five digital ecosystems and core technology including mobility, connected property, connected health, wealth management, data intelligence and cybersecurity.

The company has also brought in Nazin

Solmaz Altin, Allianz Group's chief

Cetin, co-CEO of Allianz X, to take over after CEO Peter Borchers stepped down from the role (effective immediately). Borchers was CEO since September last year. digital officer, says the new strategic digital investment fund will support its "broader mandate to bring innovation into our core business, enabling us to become digital by default".

Before his departure, Borchers

PayPal's TIO network data breach hits 1.6m customers

PayPal has revealed that a potential compromise of personally identifiable information for approximately 1.6 million customers has been found on its TIO Networks.

The network, a publicly traded payment processor PayPal acquired in July 2017, has been suspended as part of an ongoing investigation of security vulnerabilities.

The firm says its PayPal platform is "not impacted in any way, as the TIO systems are completely separate from the PayPal network, and PayPal's customers' data remains secure".

This ongoing investigation has identified evidence of unauthorised access to TIO's network, including locations that stored personal information of some of TIO's customers and customers of TIO billers. TIO has also begun working with the companies it services to notify potentially affected individuals, and PayPal is working with an unnamed consumer credit reporting agency to provide free credit monitoring memberships. Individuals who are affected will be contacted directly and receive

instructions to sign up for monitoring.

The technology will be developed and implemented by Tuatara.

"We want to give clients a banking app which integrates all bank accounts, including accounts with Alior Bank and with other banks, so clients always know the exact value of their accounts," says Ożga.

The bank is also said to be planning the development of a marketplace where clients can pick and choose services of partners that are complementary to the traditional banking service.

In October, Alior's Romanian branch teamed up with Deutsche Telekom Group's **Telekom Romania Mobile Communications** to develop a new digital financial service and provide the online exchange for this service.

Calum Parrv

transformed the Allianz Digital Accelerator to Allianz X, leading to the creation of private car selling platform, Abracar. Allianz says Borchers will remain as an advisor to the company in all digital endeavours.

Recently, Allianz contributed to a Series B funding round led by Fujitsu for 1QB Information Technologies (1QBit), a quantum computing firm based in Vancouver.

Calum Parry

These data breach issues are nothing new. Back in September, information specialist Equifax revealed a cybersecurity incident potentially impacting approximately 143 million US consumers. Later, the US Federal Trade Commission (FTC), Mastercard and Visa warned issuers that more than 200 million cards were at risk.

While in April, UK-based payday loan company Wonga said there may have been illegal and unauthorised access to the personal data of some of its 270,000 users. Antony Peytor

The Clearing House makes payments history

The Clearing House (TCH) has launched its 24×7 real-time payments (RTP) system, the first new core payments infrastructure in the US in more than 40 years.

RTP was designed and built through the "collaborative effort" of TCH's 25 owner banks and meets the objectives of the Federal Reserve Faster Payments Task Force. RTP is open to all US depository institutions with a goal of reaching "ubiquity" by 2020.

The first ever real-time payment on the system was initiated between BNY Mellon and US Bank. They will be shortly followed by Citi, JP Morgan, PNC and SunTrust, who represent the "industry's earliest adopters" of RTP.

William S. Demchak, PNC's chairman, president and CEO, and chairman of TCH's supervisory board, says RTP will "make everyday financial tasks such as paying bills, issuing invoices, making payroll or settling insurance claims faster, safer and more satisfying for businesses and consumers across the country".

TCH explains that RTP is designed to support the transfer of funds, request payments and provide information to deal with back office reconciliation issues.

Vocalink, a Mastercard company, adds that at its core, the technology behind RTP is an "evolution" of its system developed for the UK, Singapore and Thailand. These solutions have been designed to "run on their own rails, working alongside and between conventional settlement systems". TCH signed a letter of intent with Vocalink in 2015 to help build and deliver core elements of RTP.

As reported in August this year, Swift said it will provide US institutions with a gateway to RTP. And as instant payments become more ubiquitous in the US, Swift says it will provide an interface to manage the requirements of sending and receiving domestic instant payment transactions on behalf of customers. Antony Peyton

ABN Amro joins API rush

ABN Amro has launched the first version of its Developer Portal, with a series of commercial application programming interfaces (APIs). The bank says working more closely with external developers will help it accelerate innovation and improve its services.

"Besides pursuing its own innovations, the bank will accelerate the process by working with creative external developers and business owners to explore the future of banking," ABN Amro states.

"Developer Portal provides everything that external developers need to use the bank's APIs effectively and productively. To start, the site will provide a number of APIs for commercial clients and basic functionalities." More will be added in due course.



It also offers the use of "building blocks" for sending Tikkie (the bank's payment app) requests and sending bulk payment orders.

ABN Amro says it is "the first major bank in the Netherlands to provide access to a Developer Portal and specifically ask the outside world to become partners in its innovations". Tanya Andreasyan

Major Indian bank looks for "acquihire"

A major financial institution in India is looking to make a fintech "acquihire", according to Akhil Handa, head of fintech and new business initiatives at Bank of Baroda.

(Acquihire is an acquisition of a company primarily for the skills and expertise of its staff, rather than for the products or services it supplies.)

In a LinkedIn post, Handa says that a large bank (he clarifies that it is not Bank of Baroda) is looking to buy a fintech firm.

"The institution is at the centre of lots of

De Volksbank live with Ohpen core

De Volksbank, a retail and SME bank in the Netherlands, has migrated over 122,000 investment accounts to Ohpen's core banking platform.

Ohpen says the bank "has now completely and seamlessly integrated its investment services into its internet banking environments" using the vendor's API.

"All investment processes - from the opening and maintenance of an investment account, to order execution and portfolio management - from the different internet banking environments of action in the SME space and could provide a good platform for the team to learn and further sharpen their skillset," he notes. It is looking for a fintech with the following requirements:

■ team size – up to ten people; ■ team profile – experienced in the

lending business; core business – lending (preferably

focused on SMEs) Handa is asking interested parties to get in touch with him on LinkedIn.

Tanva Andreasvar

ASN Bank, BLG Wonen, RegioBank and SNS [de Volksbank's brands] are managed in Ohpen's core banking platform," the vendor states

Alexander Baas, COO at de Volksbank, describes the migration as "smooth".

De Volksbank carries multiple brands with a single back office and IT organisation. The product range consists of three core product groups: payments, mortgages and savings. De Volksbank has a balance sheet total of €62 billion and about 3,500 employees.

Tanya Andreasyan

Nordea finds fintech heaven with Nordic angel network

Nordea's start-up and growth unit has unveiled a new partnership agreement with Nordic Business Angel Network (NordicBAN), a network of start-up investors in the Nordics and Baltics.

The news comes from Nordea's strategic business developer, Tabitha Cooper, and

KBC seeks mobile app partnership

Belgium bank KBC with its mobile banking app is seeking to form a partnership to broaden its third-party services.

According to KBC, it's looking to offer third-party financial and non-financial products and services to its mobile customers. By providing support to selected third-parties, KBC says it wants to "strengthen" its service, and this call for interest is the first step in reaching out and potentially partnering up.

KBC says it wants people's input and

BPCE targets revenue growth with €600m digital revamp

BPCE, the second largest banking group in France, is seeking revenue growth and expansion with a new €600 million "TEC 2020" digital transformation plan.

Through its earlier "Another way to grow" transformation plan between 2014-2017, BPCE saw an increase of 730,000 active banking customers as well as an increase in the number of clients using its products.

Customers equipped with non-life insurance policies also increased by 4% - higher than at end of the 2013 and the bank was able to generate €780 million through its networks by Natixis, Banque Populaire and Caisse d'Epargne.

As part of its digital transformation, 83% of its solutions can be subscribed for electronically, with almost 80% of customers using online banking. Its 89C3 digital factory (i.e. an accelerator) is also now up and running.

Over the same period, BPCE says it found success in the investment solution

while there aren't many details besides the partnership, it does mean Nordea becomes a "Nordic angel". This means it joins other businesses to invest their "time, networks and capital into the growth of companies". NordicBAN itself supports the networking of such active business angels

welcomes those interested in a partnership to contact no later than 25 December.

FIVE STEPS, FIVE MINUTES

Last year, ING and KBC joined forces to launch a new, integrated mobile payments and loyalty platform in Belgium. This combined ING's payment app

Payconig with loyalty platforms Qustomer and KBC's CityLife. In addition to its mobile banking

services in Belgium, KBC earlier in the year unveiled a new mobile app that allows

market, with close to 6% average annual growth in customer assets in private banking and a €65 billion net flow increase in asset management business.

BPCE also became a fully-fledged bancassureur (bancassurance provider), by creating a single insurance platform, and the decision to bring life insurance and property and casualty insurance activities back in-house.

Natixis was continually expanded and results of such showed it now earns 48% of its core business net revenues internationally.

Collectively, these projects contributed to gains amounting to €863 million between the end of 2013 and the end of September 2017, with a target of €900 million for the end of 2017.

process and support 90% of active clients using its digital spaces, and will see to it that 10% of subscriptions are made via its digital channels. To do this, BPCE will

and large cross-border angel investments throughout the region.

Investments can vary per round, but according to NordicBAN, the size is about €20,000 per angel/round with 5-30% of shared stake acquired if start-ups are successful.

Calum Parry



Irish customers to open, activate and use their bank account "at any time, within just five minutes".

Calum Parry

Called TEC 2020, BPCE says its plan is to

focus on the development of channels for all its brands - focusing on cloud, data management, automation tools and shared platforms.

BPCE also says it will raise €600 million a year to achieve these goals. TEC 2020 will also allow BPCE and its subsidiaries to "step up" and provide new advisory services in retail banking, asset management, and corporate and investment banking, as well as providing staff with digital tools.

The brands that are part of the BPCE Group are Banques Populaires, Caisses d'Epargne, Crédit Foncier, Banque Palatine and most recently, Fidor.

BPCE says by the end of 2020; it's targeting net revenues more than €25 billion. It will rely on the progress between Natixis, the Banque Populaire and Caisse d'Epargne networks and a cost-cutting programme set to unlock €1 billion of savings on a full-year basis by 2020.

Calum Parry

DBS creates lifestyle branch for tech generation

In a move to attract the tech generation to branches, Singapore's DBS has launched a "lifestyle space" providing freshly brewed coffee, interactions with humanoid robots and a virtual reality (VR) area for retirement planning.

According to DBS, by utilising the "café and branch" concept, the open spaced layout creates a relaxed atmosphere. With support from Bettr Barista and the DBS Foundation, customers are welcomed by the aroma of freshly brewed coffee at the entrance of the branch.

Designed for the tech generation of today, the space offers a digital experience to meet their banking needs, the bank says.

Alongside traditional services including cash deposits and withdrawals, the branch supports video teller machines (VTMs); offering non-cash banking services and "face-to-face" video assistance, a "VR Corner" for virtual retirement planning and an on-site humanoid robot, called Pepper, to offer guidance.

Further to staple itself as more than just a branch, DBS says the new location will also become a social interaction area for student art exhibitions, and monthly latte art and coffee appreciation classes with Bettr Barista. Musical talent is also to be showcased with DBS culminating in the first-ever National Youth Music Awards

competition in 2018. Jeremy Soo, DBS Bank's head of consumer banking group (Singapore), says: "By reimagining banking, we want

Robots have got OCBC's retail banking back-end covered

Hey humans! Feeling down? Well let's get down some more. OCBC Bank has launched two robots - Bob and Zac - to enhance internal backend processing speeds in its retail banking secured lending (CSL) and finance teams.

The robot attached to the CSL team assists with housing loan re-pricing. This includes processing time, which "has been almost entirely reduced" (i.e. 97% reduction in processing time).

The bank says a staff member previously had to execute 199 process steps, toggle across five systems and 27 screens, to process one housing loan re-pricing

application. (They must have been bored out of their minds.)

The infinitely superior robot can process more than 100 re-pricing applications a day. What used to take staff more than 45 minutes to complete, now takes the robot one minute to complete. Can a robot look smug? That might be happening now.

eligibility to re-price, recommends appropriate re-pricing options, and drafts the recommendation email for customer. All this means quicker responses. Meanwhile, the robot attached to

Blackhawk Network pioneered the third-party gift card market and

continues to lead the way in gift card innovation. To see the newest developments in original content, unique delivery options and robust platforms, follow what's happening at Blackhawk. Our competitors do.

innovation.

Learn how you can drive gift card sales at hawkcommerce.com.



Viola plans to pull strings with \$100m fintech fund

Israeli investment group Viola has tuned up nicely with an initial closing of \$100 million toward a target of \$120-\$150 million for its new global fintech fund.

The fund is backed by banks, insurance companies and asset managers from North America, Europe, APAC and Israel, including Scotiabank, the Travelers Companies Inc and Bank Hapoalim.

Ignacio (Nacho) Deschamps, group head, international banking and digital transformation at Scotiabank, says the partnership "will allow us to access Israel's innovation ecosystem, including wellestablished cybersecurity and anti-fraud expertise".

Viola says it has over \$2.8 billion in assets under management. It was founded in 2000, and has invested in over 200 tech companies.

The group is led by Prof. Daniel Tsiddon, founder and general partner, who was the



to change the impression of what branch banking is for the tech generation - hence offering this new relaxed environment, where banking is woven into our customers' daily lives".

DBS says, it currently has 13 VTMs in 12 locations in Singapore and plans to install more than 20 machines by the end of 2017. Calum Parrv

The robot checks on customers'

the finance section assists with sales performance reporting. OCBC says sales reports were previously generated manually by a staff member, and to prepare a report, it requires 166 work steps across multiple spreadsheets.

In addition, staff used to spend 120 minutes preparing the report, but it is now generated in 12 minutes by the robot. The bank says management is now able to receive the report "promptly" at 9am, instead of at 4pm daily ("enabling management to make more effective daily decisions").

Antony Peyton

former deputy CEO of Bank Leumi (Israel's second largest bank) and former chairman of Leumi Partners, the bank's investment arm.

In addition, there is Tomer Michaeli, general partner, who co-founded FundBox (a small business credit and payment solutions firm); and Avi Zeevi, who has been in the fintech industry for 35 years and is co-founder of Viola Group and chairman of the Fintech Fund Investment Committee.

Antony Peyton

Top tier US bank in cash management tech revamp with Temenos and Finastra

A top tier US-based bank is modernising its global cash management ops with technology from Temenos and Finastra (formerly D+H Corporation).

The bank is understood to be State Street.

Earlier this week, Temenos issued an announcement about a "US-based tier 1 global bank" selecting its flagship T24 core banking offering "for its global cash management platform for deposit transaction processing, internal account sweeping and interest compensation".

The new solution will replace State Street's legacy tech, some of which is very

old. For example, in the UK, State Street was known to be using Integrated Banking System (IBS) from McDonnell Douglas (the system is long sunsetted and the provider is long gone).

The new cash management platform will be implemented "progressively in multiple countries across the globe", according to Temenos.

Banking Technology understands that for the payments component, the bank will use the payments platform supplied by Finastra (which stems from Fundtech that was acquired by D+H and then merged with Misys to form

Finastra). It would seem Temenos' own payments platform, Temenos Payments Suite (TPS), did not the make cut.

It is understood Temenos and Finastra (D+H at the time) jointly bid for this deal with State Street. Other contenders included FIS and Oracle FSS (which made it to the system selection final), it is believed

Temenos and Finastra both provided "no comment" responses to Banking Technology's enquiry about the project. State Street said its policy "is not to publically endorse vendors".

Tanya Andreasyan

Starling makes big European push; bolts to Yolt money app

UK-based challenger bank Starling is taking the battle to lenders after being granted a contract allowing for a big push into wholesale banking in Europe.

Starling has been accepted into the EU's payments system, Target2, to allow for faster payments for major banks and large companies. This coincides with the announcement of its European expansion, starting with Ireland.

It also received a payment services contract with the Department for Work and Pensions to assist with verifying benefit claimants for credit. The deal will allow for the bank to utilise a system to make initial small payments as a means of identity verification.

Starling is planning to launch a business current account model next year and

will be making a bid for a piece of a £833 million competition boosting fund led by RBS.

On the mobile side, it has integrated with Yolt, the money app backed by ING. Yolt says its aggregation functionality now enables Yolt users to view their Starling account details and transactions alongside their other bank accounts, together in one place.

Since launching in June 2017, Yolt states that its users have been requesting the addition of more partnerships and bank connections. Starling becomes the 29th bank, and first mobile only bank, to connect with Yolt.

Frank Jan Risseeuw, CEO of Yolt, says: "It is connections like these that contribute to a new and innovative banking landscape,

built on the principles of open banking." Yolt and Starling are using API integration for this connection. The link-up will enable Starling to join Yolt's platform with 28 other bank connections, and follows partnerships with energy comparison platform, Runpath, and international money exchange firm, Moneytis.

Yolt was launched with its open beta for iOS and Android in the UK. The app had been tested in closed beta since October last year. Yolt enables users to view their bank accounts and credit cards in one place, see what shops they're spending the most (and the most often) with, set budgets and plan for upcoming debits.

Antony Peyton and Calum Parry

Moneythor supplies PFM tech to Orange Bank

Moneythor, a Singapore-based fintech firm, has deployed its digital banking toolkit and personalisation engine at France's new mobile bank, Orange.

Moneythor says it is "providing the technology powering the digital interactions of customers with their transactions from both accounts and cards, including real-time balance and

personal financial management (PFM) features".

André Coisne, CEO of Orange Bank, says the Moneythor solution helps the bank "combine the best innovations available on the market with a relentless focus on addressing customers' expectations for money management". Orange Bank opened its virtual doors

on 2 November 2017, launched by the telco company Orange. Other tech suppliers to the bank include Wirecard and Backbase.

Moneythor was set up in 2013 and has offices in Singapore and Paris. Among its customers are DBS, Crédit Mutuel Arkéa and Acorns Australia.

Tanya Andreasyan

SocGen to cut jobs and close branches in 2020 plan

Société Générale has unveiled plans to cut costs and push itself forward towards digital banking - translation: the closure of branches and job cuts in France by 2020.

The plan, which will take course over a three-year period, involves the pursuit towards expanding its digital banking capabilities. However, in details released by SocGen, it's revealed that the result of such a move means the cutting of 900 jobs and closure of 15% (from 2,000 to 1,700) of the bank's branch network.

Furthermore, SocGen is expecting to consolidate its back office centres from 20 to 14, and the automation of 80% of its front-to-back processes. Not looking good, considering over 2,500 jobs were cut last year.

Klarna to fuel payments for Worldpay

Worldpay and online payments firm Klarna are joining forces. Worldpay clients in Austria, Finland, Germany, the Netherlands, Norway, Sweden and the UK will be able to use Klarna's invoice and credit-based payments.

The new capabilities will enable Worldpay's e-commerce business clients to offer shoppers new payment options that will allow consumers to decide how and when to pay for the goods after they receive them.

Consumers can manage the terms of their payment, opting for a 14-day payment by invoice, fixed, or flexible instalments, or choosing to spread the cost over several months. The new checkout experience does not request payment credentials at the point of checkout, but rather requests only their email address and postal code. This offers a faster checkout experience and helps retailers improve conversion rates by 20%.

With consumers turning to online shopping to fulfil not only their gadget and clothing needs but also for daily grocery and sundry items, ecommerce is more popular than ever. And with so many players flooding the market, retailers are facing increased competition.

With disruption caused by the increasing rise of start-ups, digital tools and regulations. Its 2020 plan will maintain its target of 3% revenue growth per year; pushing towards €3.6 billion revenue and an equity return of 11.5%.

With the share price of the bank dropping more than 8% so far this year, it could prove difficult - rising a lowly 0.9% in

With additional plans to dispose of its non-core businesses, accounting for roughly 5% of its capital requirements. If all goes as predicted, SocGen says it's seeking to reach an annual cost base of €17.8 billion by 2020, helped by a €1.1 billion savings plan.

Worldpay is one of the first companies piloting Klarna's new technology. The company notes that, because there is no plug-in, the service is easy to integrate and results in faster time-to-market. Additionally, risk management is taken care of. According to Michael Rouse, Klarna's chief commercial officer: "Klarna assumes responsibility for managing credit and fraud risks, allowing companies to guickly receive payment for orders, and allowing consumers to pay only if they're happy with

their purchase."

Worldpay offers products and services to a client base of 400,000. Its technology can process payments from 146 countries and 126 currencies, enabling customers to accept more than 300 different payment types. Earlier in the fall, the company built an SDK for internet of things (IoT) shopping and this summer Worldpay agreed to merge with US credit card processor Vantiv in a \$10 billion deal.

In August, Klarna launched a free peer-to-peer (P2P) payments service called Wavy. And earlier this year, Klarna acquired online payment provider BillPay from Wonga for \$75 million. Julie Muhn, Finovate

early trading in Europe this week.

Calum Parrv

PostFinance has crack at Swiss jackpot via chatbot

Sprechen Sie Deutsch? Switzerland's PostFinance has unveiled a German language virtual assistant on its website - generating automatic replies to customers' most frequently asked questions.

PostFinance, keen to tap into the fintech zeitgeist for artificial intelligence (AI), says it's the "first Swiss financial institution" to launch such a chatbot. It was developed by the IT service provider ELCA, and is based on Nuance's standard product Nina Web.

Sylvie Meyer, head of retail and a member of PostFinance's executive board, says the assistant answers "repetitive questions automatically" and so its staff at the contact centre can "focus their attention on more complex customer concerns".

The development phase lasted eleven months and various additional services which have only just been developed have been set up to process natural language.

The idea is to improve dialogue management, provide more context and improve its ability to process enquiries. PostFinance says it regularly feeds new content to the virtual assistant based on the questions asked. In addition, like almost all of these chatbots, it continues to learn over time thanks to feedback from users.

According to PostFinance, it currently recognises three guarters of all enguiries from the initial contact and can give the customer a "suitable answer".

There are no timelines or major details, but PostFinance says it will be equipped with more capabilities and more closely integrated into its existing systems: for example, to chat with a customer advisor.

For the time being, the chatbot only operates in German and doesn't have a cute name. So, my ideas are something like Gretl (meaning "pearl" – i.e. pearls of wisdom) or Monika - (a nod to moniker i.e. a name).

Antony Peyton

Prosper with ABN Amro's Prospery wealth manager

ABN Amro has unleashed Prospery, a new online wealth manager offering digital asset management combined with personal coaching by experts. It aims to deliver a personalised financial planning approach without using a traditional bank branch and individual personal bankers.

For its tech, it implemented Five Degrees' Matrix solution. According to the vendor, Matrix functions as "an orchestrating hub in the Prospery technological landscape". It holds all the client data, governs all onboarding flows and generates consistent client information across all other software solutions used by Prospery, Five Degrees says.



Prospery has recently debuted in Germany. The platform consists of Prospery View, Prospery Coach and Prospery Invest.

Prospery View is a free service that gives clients an online overview of their total assets, including accounts held with banks other than ABN Amro. Clients can opt to connect their bank accounts, so their data is automatically uploaded and updated. It also gives the client insight into the development of their future assets based on tried and tested forecasting models.

Prospery Invest, meanwhile, manages clients' investments and is fully digitally based on their individual risk profile.

Prospery Coach offers clients personal coaching by certified financial planners "whenever and wherever they want", by chat or video call. Prospery Invest and Prospery Coach are offered at fixed fees (€239 per month for both services), independent of the volume of assets invested.

The platform is available to clients with assets exceeding €200,000.

Antony Peyton

UK cybersecurity centre shows off second start-up wave

The UK's National Cyber Security Centre (NCSC) has unveiled the second wave of nine cybersecurity start-ups seeking to bolster the defence of the realm.

At the recent launch at the NCSC HQ in Victoria, London, *Banking Technology* was invited to listen to speeches, pitches and to talk with a coven of creative minds all in cahoots for the common good.

As a reminder, the NCSC was revealed to all in February 2017 – with a mission to work with the Bank of England (BoE) to produce advice for the financial sector for managing cybersecurity effectively. It is part of a raft of initiatives within the UK Government's £1.9 billion investment to revamp the nation's cyber barriers.

At the event, Chris Ensor OBE, NCSC's deputy director cyber skills and growth, said it received 116 applications – more than double in comparison to the first cohort. These were whittled down to 24 – and then to the shiny nine.

Ensor adds: "Before it was six, but can we manage? We will find out and we will experiment."

Also speaking was NCSC technical director, Ian Levy, who called these times "interesting years – as in a Chinese proverb kind of way" – i.e. there is a lot happening, and not all good.

Levy is fully aware of the challenges ahead – calling the adversaries "brilliant" and "inventive" – and "sometimes we have respect for them".

With this kind of tough scenario in place, the NCSC is looking for new solutions in the cyber fight. This is where the start-ups and the GCHQ Cyber Accelerator come in.

The companies chosen to join the nine-month accelerator outlined their ideas (and all were very slick) for security products and services that will enhance the UK's cyber defences to journalists, representatives from the NCSC, Wayra – part of Telefónica Open Future, and UK Minister of State for Digital, Matt Hancock.

The companies taking part in the latest round of the accelerator are Cybershield, Secure Code Warrior, RazorSecure, Elliptic, Intruder, Trust Elevate, Warden, loetec and ExactTrak.

Not only did I listen to the highly professional pitches, I had a chance to meet some of them.

For example, Cybershield, which is based in the UK town of Cheltenham – to be near to GCHQ – is offering tools to stop employees opening phishing emails. Elliptic is seeking to be "the global standard for blockchain intelligence" and identifies illicit activity on Bitcoin and blockchain and provides intelligence to financial institutions and law enforcement agencies.

Warden offers services that include notifying customers of relevant security events and "secure and trusted" cryptocurrency services. Considering the number of hacks in the latter sector, it may have found a good market.

loetec provides a "plug-and-play, out of the box" cloud platform for "secure" connectivity for IoT.

ExactTrak wants to help protect data – and applies its technology to laptops, external memory drives and a IoT devices. "It works even when a device is turned off." In a witty end to its presentation, which neatly was the final one, the firm showed that as an ultimate recourse, a stolen device can "self-destruct" and so all data is deleted remotely.

As you'd expect, the selected start-ups receive funding, office space, mentoring and contact with an investor network.

It will be interesting to see what happens in nine months when their accelerator experiences end.

Antony Peyton

Revolut launches cryptocurrency trading

currencies.

Consumer interest in digital currency is at an all-time high, so the time is perfect for global banking company Revolut to launch cryptocurrency trading on its platform.

Revolut account holders will be able to buy, sell, and hold Bitcoin, Litecoin and Ether. The mobile banking company, which also supports 25 fiat currencies, aims to "erase the divide between old and new money". During Revolut's one week beta test, 10,000 users traded \$1 million in cryptocurrencies.

In line with its transparent pricing

Barclaycard building digital bank in US

Barclaycard is rebranding itself to Barclays in the US as part of its retail digital banking strategy in 2018.

Barclaycard has been targeting prime and super-prime borrowers with an online personal loan offering on a test-and-learn basis to a small group of customers, according to Tearsheet. Barclaycard plans to launch the same offering publicly by the middle of 2018.

Unlike in the UK, where Barclays is based, its brand is well known among consumers, in the US it doesn't have the same kind of presence. While it does provide financial services in the US under the Barclaycard name; without a branch or offerings beyond credit cards and savings, it just isn't a household name.



Al Baraka Banking Group signs for Path Solutions' iMAL

Bahrain-based Al Baraka Banking Group (ABG) has signed to implement the iMAL core banking system from Path Solutions at four of its 15 international subsidiaries.

A number of ABG subsidiaries are already using iMAL, including Algeria, Sudan and Syria. Also, the group is implementing the system at its newlyestablished operation in Morocco.

ABG has a number of Islamic banking systems across its operations, Equation from Finastra (formerly Misys), Banxware from Future Applied Computer Technology (FACT) and Autobanker from Autosoft Dynamics among them.

Path says ABG's decision to go with iMAL was threefold: regulatory and Shari'ah compliance, fast time-to-market, and functionality.

Adnan Ahmed Yousif, president and CEO of ABG, says iMAL is "at the heart of the group's technology-driven transformation strategy". ABG issued RFPs at the end of 2016

strategy that allows users to send more than \$5,900 per month in 16 currencies with no fee, UK-based Revolut will offer low rates on cryptocurrency trading. The company will charge a flat fee of 1.5% and, thanks to its global currency platform, does not charge additional foreign exchange fees for purchases made with most fiat

The company's CEO and founder Nikolay Storonsky began working on the idea after his bank charged him \$2,000 in fees after spending \$12,000 while traveling abroad. "That is why we built Revolut," Storonsky says. "It allows you to exchange, send, and spend your money, completely avoiding all your banking fees without actually using a bank."

Over the past two years, Revolut has processed 42 million transactions for one million users in Europe, tallying up \$160 million in savings on foreign transaction fees. According to Revolut, it is "doubling the rate of new customer sign-ups versus three months ago".

Julie Muhn, Finovate

Barclaycard's CEO, Curt Hess, says: "Being a card business and heavily involved in analytics, data and the power of payments is a good starting point for us to branch more deeply into consumer retail banking."

BARCLAYCAN

Earlier in the year, Barclays US said it was dipping its toe into the financial health business, testing a personal financial management tool that aggregates all of a customer's Barclays credit cards, personal loans and savings products – as well as accounts with other banks – in one place.

Later in November, Barclays trialled a system that itemised digital receipts to its customers via a partnership with start-up Flux, a rewards and receipt platform.

Calum Parry

and Path says it was chosen following "a rigorous evaluation process".

"iMAL was selected based on its broad Islamic coverage and technological strengths, being the perfect match for the group's current and future requirements," the vendor states.

The new core banking system will support ABG's retail and corporate banking, payments, digital channels, branch automation and administration. *Tanya Andreasyan*

Are we there yet?

The payments industry was dragged kicking and screaming into the single euro payments area (SEPA), but on 28 January 2018, the initiative will celebrate its tenth anniversary. No doubt former doubters will sing its praises.

It is sometimes easy to forget SEPA, particularly as the reviewed Payment Services Directive (PSD2), which provides the legal foundation for the operational implementation of SEPA, began to grab the headlines once the technicalities of SEPA were established.

However, the plucky little initiative has grabbed the headlines once again with the roll-out of the SEPA Credit Transfer Instant scheme (SCT Inst) in late November. The scheme, created by the European Payments Council (EPC), became operational at 585 payment services providers in eight European countries: Austria, Estonia, Germany, Italy, Latvia, Lithuania, the Netherlands and Spain.

The scheme allows the electronic transfer of money – currently up to €15,000 - progressively across Europe in less than ten seconds, at any time and on any day of

the year, including weekends and holidays. The transactions covered by the scheme must be denominated in euros.

Individuals, businesses, corporations and administrations can make and receive instant euro credit transfers within their national borders as well as cross-border (starting with the eight countries), with the funds being immediately available.

The scheme is being promoted as an effective replacement for cash and cheques. The creators say it is particularly convenient, if for example, an individual must urgently send money to a relative, or to pay for a product or service that requires immediate settlement. In a standard credit transfer, a beneficiary might have to wait up to one business day to receive money in his or her account.

SCT Inst will progressively span over 34 European countries, with Belgium, Finland,



Germany, Malta, the Netherlands, Portugal and Sweden to join between 2018 and 2019.

What is more, the EPC says it will work to ensure the scheme "evolves to better reflect market needs". This will be done in close dialogue with all payment stakeholders, it says. For example, the maximum amount per transaction will be regularly reviewed starting from November 2018. "An increased maximum amount will make the scheme more attractive for companies," says the EPC. (See p26 for an exclusive interview on the subject with Javier Santamaría, chair of the EPC.)

Instant payments were one of the hot topics at the Sibos conference this year. Shortly before the event, Swift and EBA Clearing announced that users of EBA's instant payments system, RT1, will be able to access the platform via SwiftNet Instant, Swift's instant payments messaging solution, from November 2018.

Together with 39 funding institutions, EBA Clearing has been developing and implementing RT1 since April 2016. A pan-European infrastructure platform, it will be used for the 24x7 settlement of real-time payments in line with the SCT Inst scheme. The objective was to provide payment service providers across the single euro payments area with a real-time payment processing facility.

"In these exciting times when digitalisation is transforming every aspect of our society and economy, there are still plenty of payment contexts where harmonisation is lacking."

European Payments Council

Erwin Kulk, head of service development and management at EBA Clearing, says RT1 will provide the European payments industry with a pan-European infrastructure platform for real-time payments in euro from day one of SCT Inst. The accessibility via Swift's solution will provide this user community with additional choice in connectivity, he added. "We expect more than 50 users in the system by mid-2018."

SwiftNet Instant is designed to work anywhere in Europe and around the world, enabling Swift members to connect seamlessly to multiple instant payment clearing and settlement mechanisms. For SEPA, Swift will offer connectivity not only to RT1, but also to the Eurosystem's Target Instant Payment Settlement (Tips) platform. Swift is supporting the Eurosystem's aim to create a single gateway into its market infrastructure services and access to other clearing and settlement mechanisms.

Alain Raes, chief executive of Europe, Middle East and Africa at Swift, says: "Europe is taking important steps to ensure its lead in the instant payments area and we are pleased to be able to connect our customers to such critical infrastructures. Our solution is futureproofed to meet the current and future messaging needs of our customers in Europe and those in the rest of the world." The solution for European customers is the next step in Swift's global instant payments strategy, which began in 2015 when the co-operative was awarded the contract to build the messaging infrastructure to underpin Australia's new payments platform (NPP). Australians can expect to make instant payments from

January.

"There's a lot of discussion about instant payments. Without that we won't see the full potential benefits SEPA delivers. So, we are absolutely not yet done when it comes to SEPA."

Paul Taylor, Bank of America Merrill Lynch

For Paul Taylor, managing director at Bank of America Merrill Lynch, SEPA has achieved some of its benefits but there is some way to go. He believes there are two phases of adoption for any payments initiative: compliance, realisation and the ability to go live; and adoption. On the first point, the market has achieved this, but he does not think readiness nor compliance gives "full marks" for success.

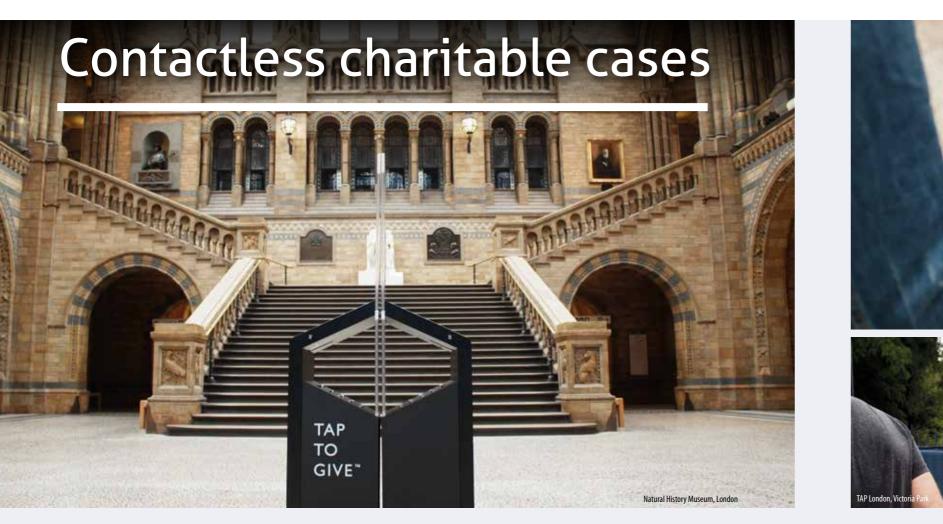
The second phase, adoption, is the most important. "In this regard, we have seen some of the benefits of SEPA and credit transfer and direct debit volumes have risen consistently. This is in part because these are attractive instruments versus legacy instruments," he says.

To realise the full benefits of Sepa, business models and treasuries must change to take advantage of the truly cross-border instrument that is SEPA. On the technology front, more treasuries must adopt the ISO 20022 standard, and ERP and accounting systems must catch up with the concept of SEPA.

"There's also a lot of discussion about instant payments. Without that we won't see the full potential benefits SEPA delivers. So, we are absolutely not yet done when it comes to SEPA."

The EPC agrees, pointing out that although migration to the SEPA Credit Transfer (SCT) and SEPA Direct Debit (SDD) is complete, EU regulators expect further harmonisation in mobile and online payments. "In these exciting times when digitalisation is transforming every aspect of our society and economy, there are still plenty of payment contexts where harmonisation is lacking and where the EPC continues to improve the ease and convenience of payments for European citizens and businesses," it says. bt Heather McKenzie

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Charities large and small are waking up to the need to embrace contactless payments. *Banking Technology* looks at the drivers, challenges and opportunities.

On the streets of Amsterdam and Rotterdam, rough sleepers have been provided with winter coats incorporating contactless payments technology. In the London Boroughs of Hackney and Islington, people experiencing homelessness have been given portable terminals. In the Natural History Museum in London, a contactless terminal under the iconic blue whale skeleton in the main foyer has proved a success.

These are all pilot projects but there is no doubt that the charity and notfor-profit sector is now rushing towards contactless payments, for good reason. As people carry ever less cash, particularly in metropolitan areas, so many charities have seen a steep reduction in donations. While there are undoubtedly other factors as well, consumers have become comfortable with contactless in an extremely short space of time and studies have shown that many would now favour this method for charitable giving.

THE RATIONALE

A survey of 2028 UK adults carried out for Barclaycard in January 2017 by YouGov concluded that charities could be missing out on more than £80 million in donations each year by only accepting cash donations. Around 42% of respondents said they carried less cash now than three years earlier.

Andrew O'Brien, co-founder and CEO at specialist fundraising technology company, GoodBox, points to the drop in charitable giving in the UK in the last ten years from 0.75% of GDP to less than half a per cent. "You can assess the reasons but I'd strongly argue that it is not because things are getting any better, there are now more homeless people than the population of Newcastle," he says.

As well as a reaction to the demise of cash, the contactless approach provides reassurance for the donor. In the Dutch example, run by the Helping Hearts charity, the integrated patch in the winter jacket enables people to transfer one euro per tap using the NFC technology. After the donation, donors receive a payment notification in their bank account, with a personal thank you from the homeless person.

The homeless person can only spend the money in the account through an official homeless shelter, for a meal, a bath or a place to sleep. They can also choose to save the money and spend it on bigger goals, such as training courses, or might choose to keep it per se, to start to build some savings. This controlled spending model addresses the concern donors may have about how their money will be spent.

The approach also brings recipients into the financial services sector, from which they are often excluded. For instance, the UK's long-standing Big Issue magazine, which empowers homeless people but has seen a steep decline in sales in the last few years, is also trialing contactless and the proportion of the cover price that goes to the seller will credit a bank account. In fact, an individual Big Issue seller was ahead of the charity. In 2016, Simon Mott, a former London Underground driver who had been selling The Big Issue outside South Kensington tube station for the previous five years, invested £59 in a card reader from Swedish firm iZettle so that he could take card payments using his smartphone after seeing a steep decline in the number of people carrying loose change.

The route being taken in Hackney and Islington by charity, TAP London, has the same reassurance but with a different approach. "We first wanted to take contactless and use it in an applied way to create a new model," says co-founder, Katie Whitlock. Having trialed NFC terminals with volunteers over the summer, the charity has been piloting them with homeless people.

She explains that donations go to local charities, such as the Islington Foodbank – "the localness went down really well" –

as well as providing the homeless street funders with the London Living Wage (it is hoped in future to also gain sponsors for the wages).

In addition, TAP plans to provide training and speakers to allow the fundraisers to build up skills in sales so that they can move into employment. "We wanted to put the generosity of Londoners to good use in a way that's safe, quick and easy," says Whitlock. To date, its devices have been set at £3 per tap; donors are given "thank you" cards with artwork from local artists. While London-based so far, she feels the model is perfectly applicable beyond here.

"The customer uplift more than justifies the cost."

SPOTLIGHT: CHARITIES & CONTACTLESS PAYMENTS



Sophie Green, recently recruited by the UK's Charities Aid Foundation (CAF) from American Express as head of customer offer, believes there is the need to give potential donors the easiest way to donate. While contactless might still be less relevant in some countries, in the UK and other developed nations, it is becoming critical, she believes. At the same time, she points out that



while "contactless is a great facility to help end-causes", it is just one component. There are also the implications for payments of regulations, particularly PSD2, she points out, plus other forms of funding, particularly crowdfunding, and other potentially relevant technologies, including

artificial intelligence (AI) and blockchain.

THE SOLUTIONS

Set up in 2016, GoodBox looked at the challenge from the charity perspective, says O'Brien. It saw the need for one point of contact, the ability to purchase and rent devices, and to have consolidated analytics and affordable hardware that would suit different needs. At the higher end, it envisages large charities with networks of thousands of units, so its platform has remote monitoring, including alerts if a device goes offline.

On the donor side, GoodBox identified the power of story-telling, along the lines of TV adverts, says O'Brien, so there is the ability to convey video and still imagery or messages on its devices.

There might also be a need to quickly change messages, such as in the event of a disaster, so new messages can be uploaded by charities to the central cloud-based portal and pushed out to all devices.

Andrew O'Brien, GoodBox

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Where an organisation such as a church or supermarket supports multiple charities, there can be revolving displays and donations can be allocated to each.

"Technology-based solutions should be user-led," says Hugh Goulbourne, senior associate at advisory business, The Social Innovation Partnership (TSIP). This includes the commissioning organisation as well as the actual user. It should be about how to make a difference to the person who needs it the most, he says, not about, for instance, reducing the cost of delivery.

"We are guite confident that this is the type of innovation that's needed. But however we set up the giving experience, there has to be the same sort of safety and confidence between the recipient and the giver."

One project TSIP is advising on is to bring the Helping Hearts contactless patched coats from the Netherlands to the UK, initially in London, Manchester and Liverpool.

The established payment heavyweights are also active. In particular, Barclaycard carried out a pilot in Q4 2016 with nine national charities and two museums. The Barclaycard donation boxes comprised a small card reader; a branded, handheld box specific to each charity; and an accompanying payment acceptance app, connected to the reader via Bluetooth. Partners were brand design agency, Sprout, payment gateway provider, Payworks, and mobile payments specialist, Miura Systems.

Barclaycard has stated that the launch of a full charity box offering is planned for early 2018 as part of its mobile point-ofsale "Barclaycard Anywhere" range.

GoodBox emphasises the benefits of being a fundraising payments specialist and one-stop shop. It claims to be "actively engaged" with 180 charities, 40 museums, 15 hospitals and a number of banks in the UK, and with interest from at least seven other countries.

It has three devices, comprising a handheld GoodBox mini, which is contactless and chip and PIN-enabled; a larger unit with 7" LCD screen; and the standalone GoodBox Pro terminal. Chip and PIN-enablement allows donations above the maximum limit for contactless Sourced from China, GoodBox was

opportunity for them."

careful about the supply chain for its devices. "We walked the floor of all the factories we're using," says O'Brien. It is now crowdfunding, ahead of the launch of its next version of devices in March 2018. Donors can specify the amount they want to give or can choose a pre-set amount. GoodBox co-founder and COO, Francesca Hodgson, savs, "a lot of times, because it is so convenient, people are happy to select the pre-set amount". So far, a pre-set amount of £5 has been well received, she says, but points out that the pilots have mostly been in London to date so this might vary elsewhere.

GoodBox estimates that to date there has been an increase of around 24% in donations via contactless cards versus cash. For a museum, for instance, this means an average return on investment of one week; for a mobile device, it claims it is closer to nine hours. "The customer uplift more than justifies the cost," says O'Brien.



"The beauty of digital transactions is that things are scalable, and smaller charities can often be more creative, it is a huge

Sophie Green, CAF

CAF's Green believes the technology can be applicable to most sized charities and it might be the smaller ones that are quickest off the mark. "To some degree, the beauty of digital transactions is that things are scalable, and smaller charities can often be more creative, it is a huge opportunity for them."

CONCLUSION

TSIP's Goulbourne describes contactless as bringing the charity and not-forprofit sector "up-to-date, especially for a demographic of under 35", although points out that ever more people generally are "used to one or two touch payments".

However, he emphasises that the solutions need to be cost-effective. For the Big Issue model, for instance, the cut taken by the payment company has to come out of the seller and/or the charity's income. Ultimately someone pays somewhere along the line but in the pilots to date, it doesn't look difficult to make the business case.

GoodBox's O'Brien describes his company as "the bridge" that is trying to reconnect "how donors want to give and how charities are able to receive". The company isn't solely focused on contactless, he points out. It is quick and simple but if something else came along "then we would turn to it immediately". For instance, there is room on its devices to support QR codes if there proves to be a justification for doing so.

For the time-being at least, contactless is likely to be the major focus for charities. From today's pilots, it won't be long before this form of payment becomes commonplace on the streets and elsewhere of countries around the globe. bt



TSB has unveiled its new banking tech platform, Proteo4UK – aimed to bring the "liberation" to the bank on all fronts.

"We have created a more digital, agile and flexible TSB," stated Paul Pester, CEO of TSB, at the unveiling of the bank's new technology platform, Proteo4UK.

The core originates from Proteo, the platform of TSB's Spanish parent, Sabadell. In turn, Proteo's roots are in the Alnova retail core banking system supplied by Accenture. Sabadell has been developing the system under its own steam for a number of years and owns the IP.

The project to build Proteo4UK has been underway for two and a half years, and some components are already in production, such as the new mobile banking app (launched in March this year) and the platform for mortgage brokers.

Customer migration is yet to come – the bank will be working on this in 2018.

Carlos Abarca, CIO of TSB, says the new system is "customer centric by design" and "enables the open banking revolution".

"Proteo4UK was built in close cooperation with world-class companies, and has very few legacy systems," he states. "It is a brand new core banking system for us."

Proteo4UK is running "in a very active mode" out of two new data centres in the UK. In case of a disaster in one of the centres, all critical services will switch "with no interruption or loss of customer data, transactions or services" to the other one, Abarca explains.

Pester says the new set-up is going to save TSB over £100 million a year. At present, the bank continues to rely on Lloyds (the two were one entity until four years ago) for its core banking software, which is provided on a hosted basis and costs £220 million a year.

"We are liberating TSB by moving to the new platform," Pester states. In addition to significant cost saving, it enables flexibility in choosing providers and partners, he explains. For example, the bank is moving all of its current account debit cards to Mastercard (farewell, Visa) in 2018 as part of a new seven-year agreement. It has also recently signed a five-year deal with

"We are liberating TSB by moving to the new platform."

Paul Pester, TSB Bank

NCR Corporation - for the latter to look after the bank's 900+ ATMs and IDMs as well as provide service desk support for its employees across its branch network.

There are also plans to move into the SME banking segment, which will be supported by Proteo4UK. TSB is bidding for a share of the £750 million fund set up by Royal Bank of Scotland (RBS) to boost business lending in the UK (the fund replaced RBS's failed attempt to shed 300 branches and carve out a separate bank under the Williams & Glyn brand). Pester says TSB is aiming to get three grants worth £60 million, £100 million and £20 million.

Abarca highlights the benefit of launching new products and services "at a speed that has not been seen in this country". The bank was the first in Europe to launch the iris scan technology for its mobile app; first in Europe to enable Samsung Pass for login and payment authentication; and among the first in the UK to introduce the facial recognition technology, Face ID, for Apple's iPhone X users (for login and payment authentication).

"It's the technology journey that we are on together with our customers," Abarca says.

ALL CHANGE

The platform was built with a great deal of input from TSB's employees - or "partners" (as the bank calls them) - says Helen Rose, the bank's COO.

The team was careful to minimise the impact on the customer side, she says, e.g. no changes to sort codes, account numbers and so on, but for the "partners" the change was monumental.

All channels systems, all back office and internal systems (e.g. HR, ERP etc) and "every single piece of IT kit in all offices" were replaced, Rose says.

"It was a massive effort – 300,000 hours of partner training, 80,000 tests so far." The bank has also introduced a new digital workplace solution, with video conferencing and other remote working capabilities, as well as a bring your own device (BYOD) policy. "We want to attract the best talent - and thus we are creating a work environment and

"[The app has] the speed, adaptability and flexibility unheard of before."

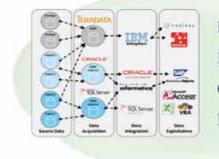
Genevieve Kangurs, TSB Bank

culture that enables greater flexibility and productivity," Rose states.

GOING MOBILE

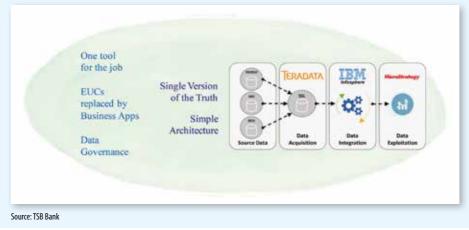
As mentioned above, TSB launched a brand new mobile app, based on Proteo4UK, in early spring this year. It is hosted on the Amazon Web Services (AWS) cloud.

Genevieve Kangurs from TSB's digital transformation office says the app boasts "the speed, adaptability and flexibility



Duplicate technologies Multiple data stores Complex Architecture Heavy reliance on EUCs

TSB Bank's data environment before (*above*) and after (*below*)





unheard of before". New features and enhancements are launched every month, based on customer feedback. "We listen to what our customers want," she states.

For example, navigation has been simplified further and merchant logos have been added to transactions so a user can easily see where they spent the money.

The year 2018 and beyond will be the "humanisation of digital" for the mobile app: more use of artificial intelligence (AI), money management capabilities, a digital passport as well as other useful features (e.g. advanced transaction view and spending insights).

Thanks to agile methodology, TSB can bring to market new mobile app features in just four to six weeks, Kangurs says. In the previous environment, this took up to six months. "We have a great partnership with Sabadell and the development team in Barcelona," she notes. bt

Tanya Andreasyan

DATA CENTRALISATION

TSB describes data as "the life blood of banking". The bank has transformed its data environment to "build a foundation to respond to customer and regulations quicker".

The previous set-up had a complex architecture, resulting in duplicate technologies, multiple data sources and heavy reliance on end-user computing (EUCs).

The new structure has simple architecture, is centralised and offers single version of truth. For example, change of address – a point of frustration for both customers and employees, as it had to be done multiple times in multiple systems - can now be done just once across all systems.

Teradata's tech supports data acquisition, IBM Infosphere provides data integration and MicroStrategy enables data exploitation.

TSB has also invested in data quality tools and has created a data catalogue about its data (meta data).

"We can now meaningfully apply and use the data for our processes, customer services and new products," says Kate Gallego, head of business intelligence at TSB.

SCT Inst: catalyst for a new world?

It may not provide all the ticks on everyone's wish list, but the new SEPA Instant Credit Transfer Scheme (SCT Inst) could well be the start of something even more seismic for the European payments sector and also pave the way for a different, more immediate way of conducting business.

Advocates of the single market see SCT Inst as the catalyst for broad transformation that, along with the Revised Payment Services Directive (PSD2), will considerably alter the face of the European payments system. Javier Santamaría, chair of the European Payments Council (EPC), believes that over a period of several years, the real impact of this initiative will make its mark on the region. "SCT Inst is more than just about making quicker payments, it reflects the growing trend for faster business processes," he says.

"Our world is all about immediacy and some aspects of business, such as banking, have struggled to adapt to a changing world – for a number of reasons. We don't expect that the full benefit of this new system will be visible for a while, but we could look back on the introduction of schemes like SCT Inst as a turning point for the industry."

"Avoiding fragmentation was probably the strongest argument for the implementation of SCT Inst."

Javier Santamaría, EPC

SCT Inst could strengthen the concept of the single market that has been trying to harmonise itself against a backdrop of EU unrest and political problems in the southern half of the continent. As Santamaría points out, the EPC's raison d'etre was to further integration, so the introduction of SCT Inst was as much about preserving that mission as it was to bring new technologies to the broader environment.

"EPC was created for SEPA and our underlying goal is the development and furtherance of the market. Yes, the arrival of various national solutions was a concern, but it also reflects the innovation that's in the ecosystem. Avoiding fragmentation was probably the strongest argument for the implementation of SCT Inst."

The arrival, enthusiasm and success of various national schemes suggests that SCT Inst is fulfilling a definite need, so some might say the pan-Eurozone solution is long overdue, but Santamaría defends any hint that Europe's structure makes it difficult to achieve. Certainly, other regions that do not have the complexity or legacy of Europe have found it easier to kick-start new systems. "Although we are obviously championing and working towards a single, integrated market, we have to accept that some practices remain localised. Europe's diversity is seen as a positive in many cases, but it can also create obstacles, meaning it takes longer to reach consensus and to conclude projects than in lesser developed markets. It does take more time in Europe, we cannot deny that," admits Santamaría.

"Europe's diversity is seen as a positive in many cases, but it can also create obstacles, meaning it takes longer to reach consensus and to conclude projects than in lesser developed markets."

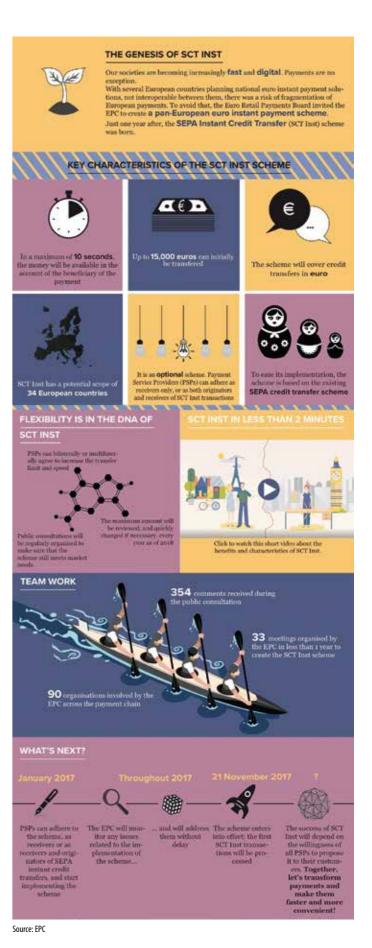
Javier Santamaría, EPC

Yet bringing some 500 million people into a single scheme for euro transactions is seen as something of a triumph. But expectations have to be tempered and the EPC and Santamaría have not tabled unrealistic deadlines. This conservative view is shared by many, judging by a survey on the EPC site asking people when they expected "critical mass" to be reached in the scheme. A third of respondees felt that the system would have sufficient traffic after 2020, but within SEPA, there are deadlines imposed on new projects for the adoption process - normally two to three years. In other words, behind the scenes, people will not wait forever.

That may be academic, though, as Santamaría expects SCT Inst to be well received and to meet all deadlines imposed upon it.

If fragmentation across European payments would have been a problem, the issue of interoperability is definitely an ongoing concern. For SCT Inst to be truly successful, systems will need to speak to each other and broad adoption has to be a pre-requisite. From the outset, it is an optional system, so if that's the case, how will it become ubiquitous? Again, Santamaría is confident that market forces will drive its use.

He is adamant that optionality is not an obstacle although there are other issues at stake, such as the need for complementary, interoperable systems that allow technical integration and the cost of investment associated with new systems – some smaller banks might find the bill too high and decide not to offer the



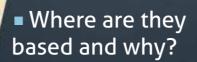
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"We don't expect that the full benefit of this new system will be visible for a while, but we could look back on the introduction of schemes like SCT Inst as a turning point for the industry." Javier Santamaría, EPC

service, although those that do not take up the challenge run the risk of losing out on a big business opportunity. Santamaría adds the EPC didn't want to make anything mandatory at this introductory stage as this would bring added pressures.

Importantly, one of the reasons for optimism is that SCT Inst is, in many ways, a response to customer requirements and Santamaría sees similar demand driving the take-up of the new system. "I am of the opinion that natural momentum will dictate the speed of adoption - customers that want the convenience and benefit of real-time payments will ask their payment service providers to offer that service."

Of course, there are reservations about security and the need for due diligence to keep pace with instant payments. Maintaining risk management measures when the world has just got considerably faster poses significant challenges and the EPC will be watching this issue closely in the early months.

Within the system, elements such as data transfer, screening, validation, authorisation and settlement have to be built in, but with an instant payments environment, these steps have to be executed in a very tight timeframe. Naturally, there is some anxiety that this may make any such system vulnerable to missing errors or criminal activity such as fraud, money laundering or other aspects of cyber crime. "Everyone

pragmatic."

knows this is a major priority for our scheme," says Santamaría. "But the launch of SCT Inst and other systems that offer realtime payments provides the opportunity to overhaul existing measures to ensure they comply with our requirements and allows the chance to implement the best possible controls."

There are also questions being asked about the transfer limit for the system - a maximum of €15,000 per transactions. On a consumer basis, this would appear to be adequate, but if SCT Inst is to flourish on a B2B basis, surely this is too low, and possibly over-cautious? Santamaría explains: "This is something that is frequently discussed and of course, we will need to watch it carefully. People should be aware that nothing is cast in stone with this new initiative. Of all the things that we will be reviewing on a regular basis, B2B business and this limit will be a priority point. We are prepared to act if we need to and act quickly. Our approach to this is very pragmatic."

Santamaría sees SCT Inst and PSD2 as signs of our times, both being an underlying response to a market that is constantly evolving. SCT Inst was first discussed two years ago and its details have been known for at least a year. Concludes Santamaría: "It is no coincidence that both are being launched at more or less the same time. They both have a common goal in promoting an integrated market with a greater level of homogeneity. One of PSD2's objectives is further increase innovation in payments, so I am very confident that we will beat expectations for SCT Inst. We are at the start of a journey that will see a host of new methods of payment, so it's an exciting time for our industry." **b**t

Neil Jensen

"We are prepared to act if we need to and act quickly. Our approach to this is very

Javier Santamaría, EPC

A world of possibilities

Amid the hype around distributed ledger technology and blockchain it can seem they are technologies looking for solutions. In the heavily paper-based business of trade finance, such technology looks promising and progress is being made elsewhere.

The milestones in applying digital ledger technology (DLT) to trade finance are coming thick and fast. In July this year, Japanese bank Mizuho completed a trade finance transaction between Australia and Japan, digitising all necessary documentation and sharing the data with multiple participants across a distributed ledger. In August, software firm R3 and 12 banks developed a prototype trade finance application on R3's DLT platform.

Trade finance is a complex, paper-based activity. It encompasses lending, issuing letters of credit, factoring, export credit and insurance. Companies involved with a trade finance transaction include importers and exporters, banks and financiers, insurers and export credit agencies, and other service providers, such as customs organisations. Documentation is an important aspect of trade finance, but it isn't standardised and invoices, letters of credit and bills of lading can differ greatly from country to country.

In the Mizuho project, several benefits were identified: shorter delivery time for trade documents (reduced from multiple days to two hours); reduction of time required to create and transmit documents, as well as labour and other costs through document digitisation; and increased transparency by sharing transaction details with all parties. There were challenges, however, as the bank found it was not possible to transmit trade transaction information in digital blockchain or DLT format to parties that did not use the platform. Also, transactions must be conducted as before, and enabling the transmission of the wide variety of information necessary for trade transactions would require standardising the information for blockchain and DLT at an international level.

The key innovation that blockchain brings to the table is the ability to move to a distributed dataset, says Peter Jameson, co-head of product management, global transaction services at Bank of America Merrill Lynch (BAML). "For trade, the adoption challenge lies in the fact that today, much of this data is in paper form. For blockchain to play a role in trade finance, the industry needs

"There are certain legislative issues that need to be addressed before most of the projects can be put into production."

Evgeniy Kravchenko, Sberbank

to adopt a range of digitisation tools, and a dataset that can then leverage what this technology has to offer. Innovations such as enhanced character-recognition technology, robotics and artificial intelligence can all play a role in this digitisation journey."

But there are other challenges to consider in the adoption of blockchain technology, he adds. The cross-border nature of trade and the range of participants in any trade transaction make it difficult to drive forward a common set of standards that would make blockchain truly effective. "Add the fact that trade has traditionally lagged other parts of the transaction services world from a digitisation and automation point of view, and it would clearly be somewhat of a challenge to get all players, across all jurisdictions, to agree on the single set of standards that would be key to blockchain's trade success." Moreover, the cost benefits would not be "immediately obvious". Although inefficient, paper-based trade is tried and tested, and players are more inclined – particularly when seeking to mitigate risk - to "stick with what they know" over charting unknown innovative technology territory, he says.

Vinod Madhavan, head, trade at South Africa's Standard Bank, says the search for operational efficiencies in the largely paper intensive trade finance business, means there should be increased adoption of digitisation and digitalisation in trade finance processes. "By digitisation, I mean the conversion of analogue content into digital form and "There has been a lot of hype surrounding blockchain and distributed ledger technologies, which is why we have kept our proofs of concept to use cases that solve real-world problems."

digitalisation means the use of data or technologies in the trade and supply chain. We would expect adoption to happen across the physical supply chain, the financial supply chain (purchase to pay and order to cash) and in the documents chain, including movement of bills of lading, insurance certificates etc."

-

Standard Bank believes the benefits from the digitisation of the "documents chain" can be realised fastest by enabling electronic copies of bills of lading to be sent from the exporter (or exporter's bank) to the importer (or importer's bank), in a manner that secures their legal transferability and drastically reduces delays in couriering the documents. Standard Bank has successfully conducted proofs of concept (PoC) using blockchain in the digitisation of documents. It is working with various participants to achieve commercial viability. The bank also recently joined R3.

By the end of 2016, a consortium of seven European banks formed the Digital Trade Chain (DTC) initiative. DTC is a blockchainbased digital platform for managing and tracking domestic and cross-border open



Nigel Dobson, ANZ

account trade transactions. The members of the consortium are KBC, Unicredit, HSBC, Rabobank, Societe Generale, Deutsche Bank and Natixis.

The aim of the project is to enable authorised European small and mediumsize enterprises (SMEs) to increase and enhance trade transactions. These will be initiated on a paperless and secure basis, and tracked at each stage of the transaction lifecycle, through to the point of settlement and payment. Launch is scheduled for 2018 in Belgium, France, Germany, Italy, the Netherlands and the UK. Inclusion of other countries and additional service providers may be considered in the future.

"The DTC initiative is helping us to understand the difference between a blockchain PoC and launching a real product," says Anne-Claire Gorge, global head of product management and innovation – trade services and finance. "All of the banks involved are working very well together, but it is still a very complex and challenging project."

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The challenge does not come solely from a technology perspective, says Gorge. "We are creating a brand-new solution that is not defined by regulators. The project has started with a restricted scope of seven banks in Europe, which is designed to help keep complexity to a minimum. The aim is to ask other banks to join the initiative to extend the geographical reach as much as possible."

Vinay Mendonca, global head of product and propositions at HSBC, says unlike previous digitisation attempts in trade finance, some of the current DLT work streams are considering interoperability. "In the past, digitisation occurred only in islands as particular processes were digitised. Now we are looking at the full breadth of trade finance. If we get DLT in trade finance right, with seamless interoperability, our clients and other parties in the trade chain will benefit greatly," he says.

The key step-change for trade on the journey to blockchain adoption is how information could be digitised and captured early in the transaction cycle, so it can be further leveraged to the benefit of banks and clients, says Jameson. Capturing data upfront would mean that banks could use it for deeper analysis and profiling of client flows - either for enhancing risk management; supplementing compliance controls; or identifying client needs that could drive the cross-selling of other capabilities. "Taking it one step further, by driving automation, banks could achieve greater scale and reduce the reliance on people thereby improving efficiency, mitigating human error, reducing costs and managing risk more effectively," he says.

Many clients' frustrations in trade finance are related to what banks think of as "ancillary processes", such as onboarding, the management of KYC, paper-based account opening, identity management and contract

negotiation. Blockchain could arguably have a greater short-term positive impact on these processes than on trade or payment flows themselves. This is where the industry could begin its focus, to deliver tangible, short-term benefit, says Jameson.

Despite the challenges, the potential benefits blockchain could bring to trade flows cannot be ignored, says Jameson. "The distributed nature of the data could significantly reduce cycle times - for example, by making data simultaneously available to all parties in a transaction, each could perform their respective checks in parallel, reaping immediate benefits over today's slower, linear approach. Furthermore, the availability of this data could significantly increase risk management and compliance checking.



"For blockchain to play a role in trade finance, the industry needs to adopt a range of digitisation tools, and a dataset that can then leverage what this technology has to offer."

Peter Jameson, BAML

And when combined with the internet of things - by integrating data on the physical location of goods, containers or vessels - it's fair to say that blockchain infrastructure could become a very powerful tool for the industry."

Standard Chartered Bank's Hong Kong subsidiary announced in March that it had completed a DLT PoC for smart contracts in trade finance. Standard Chartered is the lead bank of the DLT Trade Finance Working Group under the Hong Kong Monetary Authority's Fintech Facilitation Office, collaborating with Deloitte Touche Tohmatsu and four other banks in Hong Kong.

The bank said the PoC was a "significant milestone in the digitisation journey of trade finance". Gautam Jain, global head, digitisation and client access at Standard Chartered's transaction banking division said DLT will deliver improved efficiency and greater transparency to trade finance clients. "We see significant potential in the application of smart contracts in trade finance and will continue to work with industry partners and regulators to make this a reality in the near future."

His colleague, regional CIO, Greater China and North Asia, Peter Clark, said DLT in trade finance was not just about digitising the processes, but also standardising the data models and enabling more collaboration among industry participants. In the next phase of the project, Standard Chartered will invite clients and a number of intermediaries to join the pilot.

Russia's Sberbank believes blockchain technology will significantly influence the financial sector in the future, says Evgeniy Kravchenko, senior managing director and head of Sberbank's trade finance and correspondent relations division. "We have about 20 projects under way related to the implementation of blockchain in various activities, including documentation exchange with state authorities, factoring, trade finance, payments etc," he says. "As the technology is relatively new, most of our projects are at prototype or pilot stages. There are certain legislative issues that need to be addressed before most of the projects can be put into production." Most regulatory authorities, including those in Russia, realise the necessity of creating transparent rules for this new sphere, including cryptocurrencies and smart contracts, for example.

"We see significant potential in the application of smart contracts in trade finance and will continue to work with industry partners and regulators to make this a reality in the near future."

"Like most leading banks, we have analysed the impact of DLT on traditional trade finance products and definitely believe that its use will be beneficial for all parties involved. Our pilot cross-border letter of credit transaction has proved the benefits of transparency and increased processing speed due to the electronic exchange of documents. This technology is definitely the future."

While trade finance efforts are well under way, financial institutions are investigating other potential applications for blockchain and DLT. Nigel Dobson, general manager, transformation projects, ANZ, says: "There has been a lot of hype surrounding blockchain and distributed ledger technologies, which is why we have kept our proofs of concept to specific use cases that solve real-world problems."

The bank has undertaken a PoC of DLT for bank guarantees for commercial property leasing. ANZ digitised and improved the process for issuing, tracking and claiming on guarantees for Scentre Group, the operator of Westfield shopping malls. The Group leases retail space to about 11,500 retailers across Australia and New Zealand, who - instead of putting down a cash rental deposit – often use a rental bond, which is issued by a bank. "These bank guarantees are typically manual, paper-based, and can be difficult to verify," says Dobson. "Also, tracking any changes to the rental agreement – and thus the bank guarantee - is particularly onerous. The trial addressed these issues and successfully showed how DLT could be used to digitise and standardise bank guarantees." ANZ partnered with IBM Research and Westpac to test the technology for Scentre Group. Dobson says it is "highly desirable" for banks to collaborate in developing DLT solutions for customers, so they can be scaled for an entire industry sector. The next step for the bank guarantee is to move to a pilot stage where additional organisations from banks to large landlords are expected to take part.



JP Morgan has been researching blockchain technology and potential use cases since 2014. "When Ethereum [a decentralised platform that runs smart contracts] emerged in 2015, it quickly stood out to us for its ability to handle business logic via smart contracts and its uptake among early adopters and developers," says Umar Faroog, head of channels, analytics and innovation, JP Morgan Treasury Services. "As we began developing use cases using Ethereum, we realised there were technical challenges we needed to address - privacy, scalability, throughput - before we could see a path to production."

Because few players were looking at these issues from an enterprise perspective, JP Morgan tackled them itself by developing Quorum, an enterprise-focused blockchain platform based on Ethereum. Quorum was released to the public in open source in 2016, making it freely available on GitHub and open

Gautam Jain, Standard Chartered

to external contributions, with key features - enhanced performance, enterprise-grade privacy, peer permissioning, configurable consensus, and a full IDE/SDK to support rapid deployment.

"Quorum is now attracting contributions from leading blockchain start-ups and developers," says Farooq. For example, zCash is adding privacy enhancements in a zeroknowledge settlement layer for Quorum and Amis Technologies in Taiwan is incorporating its recently released Istanbul BFT consensus. Also, Microsoft and Synechron are creating developer tools to make it easier to build on Quorum. "We're seeing other institutions like Santander, IHS Markit, Broadridge and the Monetary Authority of Singapore use Quorum to build blockchain prototypes with support from the Enterprise Ethereum Alliance. A Quorum ecosystem is emerging beyond any single firm, JP Morgan included."

Bank of America's Jameson says during the past year, blockchain has morphed from idea to practical reality."I believe 2018 will see us defining common industry goals and ensuring we take these forward on a pragmatic basis. We should also not ignore the other technological leaps that are contributing to a sea change in trade. Advances such as those in optical character recognition or voice recognition software have the potential to generate significant benefits too, helping to drive paper to electronic data early in the process."

HSBC's Mendonca says digitisation of trade finance is a journey, not a jump. "There will be steps along the way - for example, we will begin with digitising bills of lading and have already established an electronic bill of lading solution that is live with some title registry companies."

With each PoC initiative, the industry gains practical knowledge of DLT, he adds, which will take it ultimately to a truly digital future. bt

Heather McKenzie

Regtech to the rescue

Regulatory technology (regtech) is often cited as the answer to the rising cost of compliance, risk and reporting duties at banks. Will it help financial institutions escape IT silos and enhance control over data?

The principle of applying technology, such as regtech, to significant business challenges is "not new", says Paul Ellis, global head of regulatory product development at HSBC Securities Services. What is new is that regtech promises to marry the new landscape of post-financial crisis regulation to the new landscape of digital technologies.

Bob Garrison, CIO at the Depository Trust and Clearing Corporation (DTCC), agrees. "If you define regtech as technology companies that provide services to financial market participants to assist in regulatory compliance, then it is not a new concept and one that has been operating for many years. However, regtech is undergoing a revival, spurred by new regulations and increased pressure to reduce costs, requiring greater collaboration between technology vendors and financial market participants."

Whether new or not, for Luc Meurant, head of financial crime compliance services, Swift, regtech companies have the potential to transform compliance in the same way fintech is transforming payments and other sectors.



Regtech is often considered a subset of fintech, particularly if the focus is on start-up companies. The UK's Financial Conduct Authority (FCA) defines regtech as a subset of fintech that focuses on technologies that may facilitate the delivery of regulatory requirements more efficiently and effectively than existing capabilities. In a wider context, regtech also refers to utilities, such as Swift's KYC Registry and Thomson

"Regtech is undergoing a revival, spurred by new regulations and increased pressure to reduce costs, requiring greater collaboration between technology vendors and financial market participants."

Robert Garrison, DTCC

Reuters' Org ID know your customer (KYC) managed service.

Utilities enable banks to collectively move to shared services to get economies of scale on aggregated data in noncompetitive areas. As consolidation increases, however, the fuel for this compliance trend will eventually die out. Using data in more creative ways via collaborating with regtech start-ups potentially offers longer-term, more comprehensive enterprise-wide benefits.

In the FCA's definition regtech is another vertical within the wider fintech scene. Many of the same technologies that have been deployed on payment, capital market or other duties can find a different compliance end use. Data organising, tracking and delivery services can meet regulatory requirements and potentially pay for themselves by improving intraday

"Superior regtech can reduce costs significantly."

liquidity monitoring and pricing, reducing risks and fines, improving service and data analysis capabilities.

Regtech can also be used by regulators to improve their ability to digest the greater volume of data that is fed to them due to the Basel III capital adequacy regime, more stringent anti-money laundering (AML), KYC, sanctions, tax and other such rules. Financial institutions can use technologies such as artificial intelligence (AI), machine learning and big data analytical techniques to organise and control their regtech data in a more efficient fashion. This enables simpler compliance with financial crime controls, more efficient adherence to stringent conduct rules and Basel III reporting requirements. It also gives better data control leading to improved customer targeting, tracking and service.

DATA MASTERY

The need to protect data from numerous cyber risks can also be enhanced by improving data handling – a key characteristic of regtech solutions. Cloud computing, with appropriate security and standards, can also be used as a supporting technology to improve the sharing of data across financial market infrastructures, where it is safe to do so.

Regtech start-ups are often better at data mastery than banks. Data is almost a religion for technology companies. FIs are therefore keen to collaborate with startups to learn how to use data better within their organisations, expose it more cheaply for regulatory reporting reasons, or to get simultaneous business benefits such as

Simon Eacott, NatWest

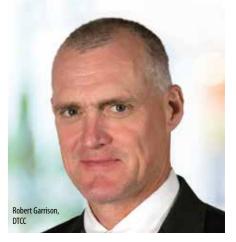
improved loan decisions, or better liquidity pricing.

Meanwhile, mastering internal or external data can also improve auditability and risk monitoring, for example on AML, across disparate financial supply chains. This may help slow fines, the risk of reputational damage and the trend of banks de-risking.

"Superior regtech can reduce costs significantly, allowing companies to free up capital to invest in more productive areas," says Simon Eacott, head of payments innovation at NatWest. "The potential of AI in regtech to analyse both internal structured and external unstructured big data at speed, with little manual effort, is attractive. In the risk management field, regtech can help create superior data modelling that more accurately conveys a company's risk profile."

Jean Devambez, global head of product and solutions, asset and fund services at BNP Paribas Securities Services, says the key driver in the rise of regtech is the increasing number of regulations "generating complexity and cost".

The fall in banks' return on equity since the 2008 crash and contemporaneous rise in compliance costs as new, more stringent regulations were introduced, mean that Fls must cut operational costs and increase controls. It is clear to see why trying to harness the innovation of fintech start-ups for compliance is attractive. >>



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Contact Judith McInerney Email: judith.mcinerney@knect365.com Tel: +44 203 377 3506 However, Garrison urges some caution on this point. Financial services providers are increasingly looking to partner with technology vendors to aid in compliance with new regulations and to address ongoing cost pressures, he says.

Collaboration between financial market participants and technology vendors, particularly in the implementation of new technologies, can create efficiencies, reduce expenses and mitigate compliance risk. "However, modernising high volume legacy systems that already facilitate compliance and operate well can be an extremely complex and expensive undertaking. Firms must therefore consider business cases whenever assessing technology changes to ensure the cost of the changes are aligned with the value which can be derived from them.

"Also, when implementing new technologies, while cost savings can be achieved by decommissioning systems, there are occasions when legacy systems have to remain in place and operate alongside new solutions, which means that the financial benefits may be reduced."

The Boston Consulting Group report, Global Risk 2017: Staying the Course in Banking, estimates FIs spend \$18-\$21 billion on AML; \$16-\$19 billion on KYC; and \$11-\$15 billion on conduct surveillance.

It's a big market for vendors. Cyberdefence risks, regulatory reporting duties and financial utilities mean that the compliance processing and related regtech market is potentially worth hundreds of billions of dollars.

HUGS AND HOTBEDS

Ruth Wandhofer, global head of regulatory and market strategy, treasury and trade solutions at Citi, says regtech is "collaborative rather than disruptive". In the wider fintech marketplace there are many start-ups that want to displace FIs or shave-off niche segments, but banks' knowledge of the compliance duties they face is a necessary component within regtech, unless players want to get their own licence.

"From a bank's point of view regtech is collaborative as we are looking for the best provider to help us with our compliance automation and data needs,"



says Wandhofer. "That may mean we invest internally or take a stake in a start-up, or we may buy a start-up outright to help us or to launch a wider third-party solution. Alternatively, it may mean participating in a shared financial utility to get economies of scale savings with other banks – whatever works best."

Pole Star is an example of a start-up and bank collaboration. It provides sanctions compliance and risk management software to banks, trading and finance companies, marine insurers and other maritime organisations. Citi supported the regtech firm after it won its regional Tech for Integrity Challenge Dublin in May 2017.

"From a bank's point of view regtech is collaborative as we are looking for the best provider to help us with our compliance automation and data needs."

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Ruth Wandhofer, Citi

The London-based company won for its range of sanction screening compliance, AML and other risk management software. The mentoring, knowledge sharing and other assistance available should lead to a better solution and may feed into Citi's trade solutions in future.

There are also standalone regtech companies. For example, Simility, a USbased start-up founded by former Google employees raised \$7.2 million in late 2015 in a Series A fundraising round led by venture capitalists Accel Partners. Simility offers a fraud prevention solution that uses Al machine learning. San Francisco-based Merlon Intelligence raised \$7.65 million in seed financing this year from the Data Collective venture capital fund and others. It targets AML via Al and enhanced big data analysis.

In the UK, hundreds of regtechs have been through the pioneering FCA regulatory sandbox, making the country something of a hotbed for regtech and other technology-based solutions.

Financial institutions should explore the collaboration opportunities available to them, via sandboxes or not. "We believe cooperation between regtechs and FIs is the way forward," says BNP Paribas Securities Services' Devambez. "The combination of regtechs' technology expertise and banks' business experience is a powerful proposition, which can help solve many of the industry's challenges."

BNP Paribas Securities Services recently took a minority stake in Fortia, a startup which uses AI machine learning and business process monitoring to help the fund industry meet rising compliance requirements and manage mounting volumes of data. "As well as helping finance the growth of Fortia, we agreed to share our expertise and knowledge of their target market to help them develop their offering," Devambez says.

"We've now gone one step further and have decided to move our trustee and depositary business onto Fortia's platform to help our clients enhance controls and operational efficiency. Our partnership with Fortia illustrates the benefits of cooperation for banks, regtechs but also the industry as a whole." **b**t

Neil Ainger

Liquidity management: real-time nostro time?

As part of its global payments innovation (gpi) initiative, Swift and a group of banks have been trialling distributed ledger technology (DLT) in the reconciliation of nostro databases in real-time.

In total, 33 global banks have taken part in Swift's blockchain proof of concept (PoC), designed to validate whether the technology could help banks reconcile their international nostro accounts in real-time. The PoC is part of Swift's gpi service for cross-border payments. The results indicate that the Swift-developed DLT application delivers the business functionalities and data richness required to support real-time liquidity monitoring and reconciliation. Issues remain, however, including data confidentiality, governance and identification framework.

"While significant progress has been made on the technology side, one must realise that it is still early days for the newer generation of blockchain and that it will still take some time before it is ready for mission-critical applications," said Damien Vanderveken, head of research and development at SwiftLab and of user experience at Swift.

Banks hold nostro accounts with each other, usually in a foreign country and in a foreign currency. Typically, the banks receive nostro account information at the end of the day. The information is often from disparate sources and must be aggregated overnight. This means reconciliation of accounts is done using end of day statements. From a liquidity management perspective, this is far from optimal.

Attempts to bring real-time to nostro accounts started more than a decade ago. Back in the early 2000s, a group of banks chose the Cable & Wireless Real Time Nostro product as a standard infrastructure for sharing nostro account information. Later, the product became Gresham Computing's Clareti Cash Reporting

"We will respond to each challenge banks face in a significant way." Wim Raymaekers, Swift with SunGard's Real Time Liquidity Management solution. (SunGard was acquired by FIS at the end of 2015.) Fast forward to today and

Services, and was ultimately integrated

developments are continuing apace. In July, Swift and the Liquidity Implementation Task Force – a group of large and medium sized custodian banks and global brokers - released an industry standard for intraday liquidity. The standard is designed to help banks comply with intraday liquidity regulatory frameworks and optimise liquidity monitoring of their correspondent banking accounts positions, through the provision of debit and credit confirmations at transactional level in real time.

Swift says around 35% of the cost of an international payment transaction is related to nostro-vostro reconciliation and liquidity, including the opportunity cost related to trapped liquidity. To manage their positions more efficiently – avoiding liquidity excess or unnecessary overdrafts – financial institutions first need better visibility of their liquidity positions on those accounts, on an intraday basis. The intraday liquidity standard is a "crucial component" to allow banks to exchange this information on a transactional level in real time, says Swift.

The standard was developed by Swift in consultation with more than 20 liquidity users and providers, providing a common set of business rules and technical specifications applying to cash reporting in the interbank space. It includes nostro and custodian cash accounts. It supports realtime transactions by transaction liquidity reporting and resolves data challenges caused by the lack of real-time reporting,

At the launch of the standard, David Gaselee, head of agency and intraday liquidity, financial institution product

"While significant progress has been made on the technology side, one must realise that it is still early days for the newer generation of blockchain and that it will still take some time before it is ready for mission-critical applications."

and reduce costs."

timed confirmations and data accuracy.



SPOTLIGHT: LIQUIDITY MANAGEMENT

reconcile those nostro accounts more efficiently and in real-time, optimising intraday liquidity, lowering costs and reducing operational risk

Didier Balland, head of marketing for correspondent banking, at Société Générale, which is a participant in the PoC, says standardisation will help to reduce costs and build the necessary base for new services. The bank will adopt the standard during 2018, he says.

Launched in January 2017, the gpi PoC aims to help banks overcome significant challenges in monitoring and managing their international nostro accounts, which are crucial to the facilitation of crossborder payments. At present, banks cannot monitor their account positions in real time because they lack intraday reporting coverage. The PoC recognises the need for banks to receive real-time liquidity data to manage funds throughout the business day. At its core, the PoC builds on the rulebook defined by Swift as part of the intraday liquidity standard.

"The potential business benefits ensuing from the PoC are clear," says Vanderveken. "If banks could manage their nostro account liquidity in real time, it would allow them to accurately gauge how much money is required in each account at any given point, ultimately enabling them to free up significant funds for other investments."

Carolyn Burke, head, enterprise payments at Royal Bank of Canada, agrees. She says blockchain's ability to enable all partners to see data in real time should bear fruit in liquidity management. A PoC, she adds, is a "learning tool" that enables participants to determine which tools work best in which areas.

Damien Vanderveken, Swift

>>

management at Barclays Corporate Banking, said the standard would help the bank's clients to manage their liquidity positions more efficiently. "Through more streamlined and standardised reporting across the industry, we hope to be able to make real-time reconciliation much simpler

The standard is also used as the basis for Swift's gpi distributed ledger PoC, which leverages the common rulebook provided by the intraday liquidity standard. It explores the use of DLT to help banks manage their intraday positions and

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In developing the PoC, Swift leveraged Hyperledger Fabric v1.0 technology, and combined it with key Swift assets, to ensure that all the information related to nostro and vostro accounts is kept private and seen only by the account owner and its correspondent banking partner. The PoC application used a private permissioned blockchain in a closed user group environment, with specific user profiles and strong data controls. User privileges and data access was strictly governed.

Nigel Dobson, general manager, transformation projects at ANZ, says the PoC leverages a bilateral trial the bank did with Wells Fargo in the third quarter of 2016 for cross-border payments. "That trial



"Although banks compete with each other in the correspondent banking business, collaborative efforts are indeed vital to benefit international trade as a whole." Paula Roels, Deutsche Bank

showed how DLT can be used for real-time nostro reconciliation to make payments more efficient. A wider multilateral trial was then tested through Swift's gpi, which aims to help banks improve their liquidity, as well as make payments faster, more transparent and more traceable." While other technologies could be just

as effective, says Dobson, DLT "covered the items on our checklist" balancing the need for security, scalability, transparency and protecting confidentiality.

The PoC is just one of a series of phases planned for gpi. More than 110 transaction banks from Europe, Asia Pacific, Africa and the Americas have signed up to the gpi initiative, which opened for live payments in January 2017. The first phase of the initiative is focused on business to business payments. A second phase will encompass digitisation of cross-border payments, followed by an exploration of the potential of new technologies such as distributed ledger, in the third phase.

Wim Raymaekers, head of banking markets and gpi at Swift, says in its initial phase, gpi uses existing payments rails, which enabled the initiative to be rolled out quickly. "Now that gpi is up and running, we can assess other technologies such as blockchain for related activities like settlement."

Nostro and vostro accounts lend themselves to DLT because they are ledgers between banks of what they have on account with each other.

For the PoC, a smart contract application has been developed on top of a DLT protocol. This is connected to debit and credit events and passes through the relevant parties allowing banks to determine their exposures and balances at any time.

gpi is very much the start of a journey, adds Raymaekers. "We will bring more value over time like blockchain, DLT and rich payments data. We will respond to each challenge banks face in a significant way."

Paula Roels, head of market infrastructure and industry initiatives, institutional cash management at Deutsche Bank – another institution involved in the PoC – agrees gpi is a journey that is just beginning. "But this initiative shows that, although banks compete with each other in the correspondent banking business, collaborative efforts are indeed vital to benefit international trade as a whole." **b**t *Heather McKenzie*

ADVERTORIAL



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 guantity 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 costefficiency 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

Movers and shakers

Bitcoin exchange Coinbase has a new president, Asiff Hirji, who will also serve in the newly created position of COO.

Hirji is formerly of Hewlett-Packard and Andreessen Horowitz; he also was senior advisor at Bain Capital; founded private investment and operating company Inflekxion; and is a director at number of tech firms including Eze Software Group, TES Global Limited, RentPath, and Saxo Bank.

Infosys has named its new CEO and MD, Salil S Parekh, with effect from 2 January 2018.

An industry veteran with over 25 years of experience, Parekh moves from Capgemini, where he is a member of the group executive board.

Infosys says Parekh's appointment is a result of "a comprehensive global search effort".

U B Pravin Rao will step down as the interim CEO and MD, and will continue as COO.

International payments platform Currencycloud has appointed Tanya Ziv as its new chief compliance officer and money laundering reporting officer (MLRO).

With ten years' experience in the legal sector, Ziv joins from telco Lebara, where she held the same role. She also worked for eToro and Cornercard UK.

Lisa Cochran and Yasaman Hadjibashi

have joined **Citi** as head of operations digitisation and technology (consumer banking), and global consumer technology head of data and analytics, respectively.

Cochran moves from Humana, where she was VP of sales, servicing and digital technology. She also previously worked at Softcard (acquired by Google) and held a variety of roles during a 17-year tenure at Bank of America.

Hadjibashi had a seven-year tenure at Barclays, most recently as group chief creation officer at Barclays Africa.

Moving the other way is Morgan Salmon, who has left Citi after almost a decade with the bank. Most recently, he was head of B2B commercial cards.

Salmon has now joined the business development team, global alliances at

Amazon Business. Salmon was also a mentor at

across its business.

Startupbootcamp Fintech and Level39.

HSBC has appointed **Mike Warriner** as CIO for its retail banking and wealth management digital division. He joins from five years at Google, where he was engineer director.

Prior to that, he spent nearly two decades as CTO at Intelligent Environments (IE), a UK-based digital banking tech firm. HSBC is investing \$2.1 billion in digital

Atom Bank has lost its MD of business banking and founding member, Craig **Iley**. Iley joined the challenger bank from Santander in mid-2014

He has joined **Digital Allies**, a UK-based tech consultancy firm, as a non-executive director. He is also a non-executive director of publishing company Remember Media.

Gerrard Schmid, former CEO of D+H Corporation (now part of Finastra), has joined the **Boston Consulting Group** (BCG) as senior advisor. Schmid was with D+H for a decade in various senior roles, but left once the company was acquired by Vista Equity Partners earlier this year.

Rob Finlay has left DBS Bank where he was SVP, experience design, for nearly four years. He has moved to Accenture as its MD, financial services, Australia and New Zealand.

Sairah Mojib has joined blockchain consortium R3 as product marketing director. She moves from a treasury and capital markets tech firm, Openlink Financial, where she was marketing director, EMEA, for two years. bt

EVENTS CALENDAR

February 2018

5-6: Seamless Thailand, Bangkok www.terrapinn.com/exhibition/seamlessthailand

19-20: PSD2 & GDPR Forum,

Amsterdam www.psd2gdpr.com

21-22: African Women in Fintech & Payments, Kigali www.awfpkigali2018.com/

21-22: Digital Integration in Wealth Management, London www.arena-international.com/ wealthmanagement/

22: Global Private Banking, London www.imn.org/globalpb

March 2018

6-9: Finovate Europe, London finance.knect365.com/finovateeurope/

12-14: MoneyLIVE: Retail Banking Europe, Amsterdam new.marketforce.eu.com/money-live/

April 2018

12-13: 10th Global Banking Innovation Forum & Expo, Prague www.uni-global.eu/portfolio-page/10thglobal-banking-innovation-forum/

17-19: TRANSACT, Las Vegas etatransact.com

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Out of office

UK start-up secures inevitable Hollywood movie sequel

With unerring predictability, the Hollywood movie machine has churned out a sequel for the energetic and eventful life story of a UK-based payments start-up.

As reported in May, the rise of Charon Ferries, the creation of the husband and wife team of Michelle and Mark Morrison (who have defied all known laws of the universe by remaining happily married), was turned into a stolid cinematic concoction - called Love Pays, by truthdodging director Ron Howard.

Like a British Airways helpline telling you all lines are "busy" – no matter what freaking time it is - Hollywood offered no surprises... and demanded a "part two" to tap into the blatant ballyhoo for fintech.

Now, Banking Technology can exclusively report on Love Pays 2 (genius!), which continues to chart Charon Ferries' progress. As a quick synopsis, they get more funding (who doesn't?), get more staff (humans, not robots), lose some money (I don't mean down the back of a sofa), get the money back (still no sofa involved), and wallow in the usual drama

that can be cranked up to any level for more appropriate action.

In a surprise twist, the producers chose David Lynch, once famously referred to as "Jimmy Stewart from Mars", to direct the film. Clearly his success from the phenomenal and guirky TV show Twin Peaks: The Return must have enchanted the movie moguls. The producers probably never watched the series, just heard it was great. Come on people! You can't seriously expect them to work! They have long lunches to attend! Sycophantic staff to intimidate!

"Love Pays 2 is a dark and twisted version of events, but highly entertaining."

Michelle Morrison, Charon Ferries

Michelle explains what happened: "We're big fans of David's work – films such as Eraserhead, Blue Velvet, Inland Empire and Mulholland Drive are fantastic - and we were delighted to meet him for a chat about our company and life story.

"He was charming, folksy and, frankly, at times bonkers. Love Pays 2 - certainly not David's choice as a title – is a dark and twisted version of events, but highly entertaining. Put it this way, if the producers had chosen Michael Bay or Roland Emmerich, you would be speaking to me from a prison cell. As I'd probably have strangled them for the movies they make"

Mark adds: "The film was enjoyable. No doubt about that. But it does require a level of patience and attention that really only existed before the internet was invented.

"Characters speak slowly with very long pauses. At one point a local priest in the audience at the premiere lost it and shouted out: 'Sweet Jesus! Get the hell on with it!'. The music is a mixture of cute tracks from the 1950s or something darker that Satan's soul. You're never quite sure where you're headed. Rather like using Uber when travelling abroad."

As with the first instalment, Banking Technology was lucky enough to get a preview of the whole film.

It's a lively and beguiling affair, which may be confusing, or at least disconcerting, to those unfamiliar with the Lynchian mindset. Scenes include someone spray painting shovels gold; lots of coffee being discussed and drunk; and for about five minutes what looked like an apricot stuck on top of a tree spoke backwards.

That said, the "apricot-tree entity" still made more sense than some of the panels I have had to sit through at fintech conferences. bt

Antony Peyton

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