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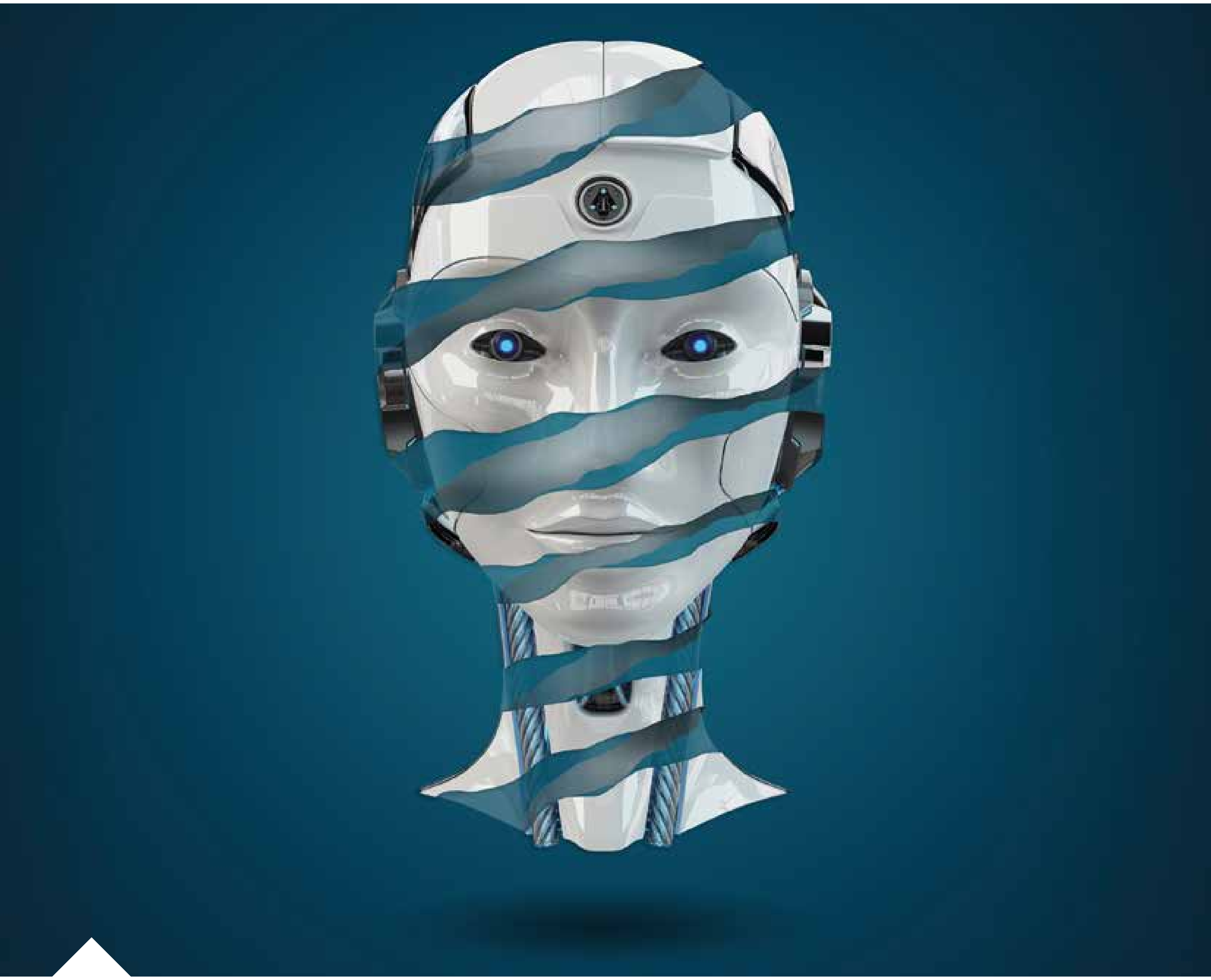

DEEP MINDS
For fintech that matters

SINGAPORE GOES AI
Training, incentives and regulation

START-UP LIFE
The art of selling to a bank

FINTECH FUTURES

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FINTECH FUTURES

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Editor's note

As the conference season is about to take a break for summer holidays, here are some observations from the evermore busy sector so far:

■ Location and venue matter. Please don't choose just with your wallet – you'll get what you pay for. Drab surroundings, bad acoustics, non-working microphones, bad layout, no wifi reception – you get the idea. Speaking from real-life experience here.

■ Don't leave the organisation and logistics to chance. Delegates should be able to get through the doors quickly, presenters should know in advance when and where they are speaking, there should be enough trained staff on the ground to ensure everything runs smoothly and efficiently.

■ The vibe created around the event matters. This includes marketing campaigns, the website, social media, on-site atmosphere and so on. The event should be, dare I say it, fun (in addition to being useful).

■ Think thoroughly about what makes the event stand out (in a good way!) from the myriad of other fintech conferences.

■ Put an effort into creating strong content. Please at least try to avoid "Captain Obvious" panel discussions and presentations. Do your research: find fresh angles, unconventional points of view, practical case studies and original topics. The industry is moving so fast, and there are lots of things to learn and debate on!

■ Speakers could be a major attraction or disappointment. Not everyone who claims to be an "expert" is one. There are charlatans out there – at the recent Blockchain Summit in London, our correspondent googled one of the speakers, who claimed to be from a big UK bank but who gave the impression of having just walked in off the street having read the Wikipedia entry for blockchain.

■ And please, please don't turn the contents part of the conference into a vendor fest! Another recent fintech event in London had a direct correlation between sponsors/exhibitors and speakers – virtually every speaker and presenter was from a company that was listed as a sponsor. The higher the status of the sponsor, the more speakers they had. One panel even had a representative from the event's PR company, discussing a subject that had nothing to do with either PR, communications or media relations.

■ Diversity is vital. Say no to an all "male, pale and stale" panel. Today there is no shortage of specialists from different backgrounds, ethnicity, race and gender.

■ And finally, put on a decent lunch! (Do you know how journalists remember conferences? By how good or bad the lunch was. I'm not kidding.) **bt**

Tanya Andreasyan
Editor-in-Chief
Banking Technology

R3 hits back at financial woe story

Enterprise blockchain software firm R3 is fighting back against a news article that claimed it was running out of money.

David E. Rutter, CEO of R3, says: "Last week a negative and inaccurate news article about R3 was published. We were saddened that any of our previous employees saw fit to spread false, malicious rumours about the company, and were very disappointed that unsubstantiated figures and comments were taken seriously by a reporter, who then subsequently chose to ignore our factual response."

According to Fortune, former employees of R3 are claiming a recent fundraise of $15 million fell far short of what was needed for it to continue operations.

There were other claims of opulent expenditure, such as short helicopter rides, and excessive salaries.

Naturally, R3 wants to set the record straight.

The firm says more than $120 million has been raised from more than 45 institutions and brought in over $20 million in revenue.

Rutter explains: "R3 has more than sufficient funding and continues to see inbound investment interest. If we decide to take on additional funding it will be because we see the strategic value of the investor, or because it will help accelerate our growth to meet demand."

In fact, in May, R3 secured an undisclosed investment from CLS, the market infrastructure group. It may be better in future to let people know the exact sum it got.

Rutter also waxed lyrical over its Corda platform. And to be fair, it has certainly been getting a lot of traction.

Some recent examples include Commerzbank calling on Corda for a trade finance thrust; and Deutsche Börse and HQLAx signing a letter of intent to form a partnership to create a securities lending solution using Corda.

In addition, Credit Suisse and ING executed the first live transaction using HQLAx's securities lending app on Corda.

Antony Peyton

Alior, solarisBank, Raisin and Mastercard unveil European bank

Poland's Alior Bank has teamed with solarisBank, Raisin and Mastercard to unleash a pan-European digital bank.

The new offering, which is planned to be launched in the fourth quarter of 2018, will be built on the "strengths of all partners".

Alior Bank will deliver multicurrency accounts with international transfers and deposits.

solarisBank will add the banking infrastructure with its technological, compliance and regulatory framework.

Raisin through its network of partner banks, is adding various savings and investment possibilities to the offering.

Mastercard's benefit optimisation programme will be used to offer additional services for the customers. The product will be available for all EU residents with a focus on the German market during the first phase of the project.

Daniel Daszkiewicz, head of fintech at Alior Bank, says: "For example, a customer in Germany, while opening an account with solarisBank, will instantaneously gain access to a multicurrency account with Alior Bank and to Raisin's savings products."

He adds that with Mastercard, customers will be able to buy additional value-added services.

According to solarisBank, the open API platform will use the opportunities from the EU directive PSD2 and open banking.

While they have unveiled a joint website for this development, solarisBank tells *Banking Technology* the name of the bank has not been disclosed yet.

Antony Peyton

Oracle Flexcube core banking system live at Invest Banca

Invest Banca, an Italy-based investment bank, has become the first taker of a localised version of the Flexcube core banking platform supplied by Oracle FSS.

The solution has been tailored for the Italian market by Cabel Holding, an IT service provider for the financial services market in Italy.

Cabel and Oracle FSS have been working together for the past two years to localise the Flexcube platform. It is available as an onsite deployment or on a hosted basis.

"This is a radically innovative solution, because it is a technology that facilitates the creation of lean products and services that are independent and based on completely different and more modern logic than traditional core banking systems in Italy," explains Francesco Bosio, president of Cabel.

Invest Banca has recently gone live with the new system. According to Stefano Sardelli, the bank's MD, it enables it "to easily and efficiently integrate with a series of specialised solutions already in use by its retail and institutional clients".

Furthermore, it allows the bank "to keep apace with ever more demanding banking regulations, such as MiFID, PSD2 and GDPR", Sardelli adds, as well as facilitates innovations around robo-advisory, artificial intelligence (AI), data science, social trading and blockchain.

"The attitude of the banking system towards innovation is changing and at the same time there is a growing interest in the world of fintech," he says.

"Invest Banca, thanks to the Oracle Flexcube solution, has taken a decisive step forward."

It is worth noting that there are earlier takers of Flexcube in Italy. Mediobanca, an Italian merchant and investment bank, signed for Flexcube a decade ago.

Also, the International Fund for Agricultural Development (IFAD), which has its HQ in Rome, took the system seven years ago. IFAD is an international financial institution and a specialised agency of the United Nations (UN) dedicated to eradicating poverty and hunger in rural areas of developing countries.

Natixis, a French corporate and investment bank, runs its international operations on Flexcube, including in Italy.

Tanya Andreasyan

UK challenger bank Project Imagine preps for launch

A new London-based challenger bank is gearing up for launch in the UK, called Project Imagine. Self-defined as a "second generation digital bank", it also aims to be a wealth management alternative from the get-go.

On its site, it claims to provide "accessible financial future for all", and that is "built on a keen interest in people and their behaviour, not numbers and stats".

The bank says it will combine original finance and tech solutions to help people save and grow their money, rather than just enhance usability.

The bank is led and was founded by Aritra Chakravarty, who comes from HSBC, where he worked in mergers and acquisition, wealth and private branches, as the global head of digital FX and investment products.

On its site, Project Imagine is currently looking to recruit a lead systems architect, head of data science and risk modelling, among others.

Project Imagine will be in direct competition with fully digital banks such as Starling, Monzo or Atom.

These have managed to have an impact in the industry, but are nonetheless struggling to maintain a momentum, so their market share is considered by many not big enough to present a threat to traditional high street banks.

"We want to be a mix of Monzo, Nutmeg and Moneybox, all in one, which means a digital current account, savings and investment all in one, with heavy focus on personal finance management (PFM)," the CEO tells *Banking Technology*. "We want to encourage savings and money management, and help people get out of the overdraft/over-spending loop – hence we will offer 3.14% in deposits from the start."

According to the CEO, the bank will launch in Q4 this year with an e-money licence, and will be looking to acquire a banking licence some time in 2020.

The CEO tells us they are in the process of recruiting its 14th engineer in Ukraine, where the team is building a fully in-house orchestration system. The core banking system will come further down the line.

Interestingly, 75% of the staff is female. "The core product doesn't change, but the way we approach the way we talk about it does. It just sets a different dynamic to the process," adds the CEO.

Henry Vilar

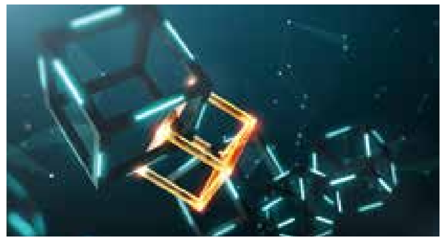
Blockchain insurance company B3i picks R3's platform Corda

The Blockchain Insurance Industry Initiative (B3i) has selected R3's Corda as the blockchain platform to build its applications and business network.

B3i reviewed the available open source blockchain technologies, and concluded that Corda was the best based on B3i's enterprise platform strategy. It is understood to have left IBM and the Hyperledger Fabric framework, on which it had developed its prototype earlier.

B3i focused on criteria such as data privacy, scalability, interoperability and developer productivity.

"The Corda platform offers the optimal solution in the market to deliver the B3i roadmap and our industrywide insurance



blockchain ecosystem," comments Markus Tradt, CTO at B3i.

According to B3i, Corda's design is based on standards, and it enables integration of Corda nodes in the IT environments that are used by B3i's clients.

R3 is also fighting back against a story that claims it has money issues (see p4).

Henry Vilar

Lemonade takes wefox to court for IP infringement

New York-based insurance platform Lemonade has filed a lawsuit against German company ONE Insurance, its parent company wefox, and founder Julian Teicke.

The complaint was filed in the US District Court Southern District of NY, and it claims that ONE was the product of reverse-engineering by wefox.

Lemonade claims wefox is "infringing Lemonade's intellectual property, violating the Computer Fraud and Abuse Act, and breaching its contractual obligations to Lemonade not to 'copy content… to provide any service that is competitive… or to… create derivative works'".

According to Lemonade, Teicke registered for insurance on Lemonade under various names and for various addresses, some of which do not exist, in order to gather information on the company's arrangement of flows.

"[The lawsuit] catalogues how wefox's founders used aliases and bogus addresses to create phony Lemonade policies and initiate fictitious claims," writes Lemonade's CEO Daniel Schreiber.

Allegedly, Teicke filed seven claims in 20 days, which prompted Lemonade to cancel his insurance. A number of other executives at wefox seem to have also filed claims at Lemonade.

Lemonade says it contacted wefox last August and requested it stopped.

Lemonade offers a digitised signup process. The firm says it redesigned its business model by taking profit out of each payment, and sending money to a charity if there isn't any claim filed by the customer.

Any proceeds generated from this lawsuit will go directly to Code.org, a non-profit organisation that aims to expand access in computer science in schools and "increasing participation by women and underrepresented minorities".

The sued company denies any culpability in the matter.

Henry Vilar

CYBG confirms £1.7bn Virgin Money takeover

The UK's Clydesdale Bank and Yorkshire Bank (CYBG) has confirmed its takeover of Virgin Money, valuing it at £1.7 billon.

David Duffy, chief executive of CYBG, says: "The combination of CYBG and Virgin Money will create the first true national competitor to the status quo in UK banking, offering a genuine alternative for consumers and small businesses."

The combined entity will have six million personal and business customers and a balance sheet of almost £70 billion. It will also become Britain's sixth-largest bank by assets.

According to the duo, CYBG shareholders will own c. 62% of the enlarged group with Virgin Money shareholders owning c. 38%.

UK trade union Unite, representing the workforce at Virgin Money and also staff at CYBG, has "expressed alarm at the prospect of thousands of job cuts".

According to Unite, this deal could result in a 16% reduction in the combined workforce – around 1,500 job losses.

Rob MacGregor, Unite national officer, says: "Thousands of banking employees have this morning [18 June] heard through the media that their jobs are no longer secure."

Unite says the combined workforce of both institutions is 9,500.

Away from job cuts, both CYBG and Virgin Money make a lot of noise about being "challenger banks", yet Virgin Money was founded in 1995. It expanded its business in 2011 when it bought the remnants of Northern Rock for £747 million.

In turn, CYBG is a holding company that owns Clydesdale Bank, Yorkshire Bank and the app-based bank B. It was formed by National Australia Bank (NAB) in February 2016.

CYBG brings its retail and SME franchises and states that its "open banking ready" digital platform is live in the market today.

"Immediate preparations" will be made to rebrand the group's entire retail operation to the Virgin Money brand, with the rest of the customer base transferring to this brand "in due course".

There will also be a migration of Virgin Money customers to CYBG's platform. CYBG is a long-standing user of a heavily customised version of Misys' (now Finastra) Equation core banking system.

This means the end of the road for the 10x Future Technologies project at Virgin Money, which got the deal to build the bank's new banking platform last year. 10x is a UK-based tech start-up founded by former Barclays CEO Antony Jenkins, with Virgin Money being its only known customer.

There will be no "big bang" migration to the CYBG platform. The transfer will be phased over a period of three years.

CYBG says this technology platform is scalable and has already seen the migration of over two million of its customers "without issue".

Antony Peyton

Better Fintech launches for financial equality

A former Green Dot employee has unveiled his new Arizona-based start-up Better Fintech to target the financial literacy and equality market.

The firm is the creation of Michael Panzarella, who has worked in various roles at Green Dot. These include chief design officer, chief product officer, SVP for product, and VP for product.

Panzarella says: "My company will be focusing on helping fintech companies, with preference to those that promote tools and services that foster financial literacy and equality."

These are very early days as a website and blog are coming soon.

There are no more specific details to share – such as launch date or funding. However, Panzarella has plenty of experience in the industry, specifically UX, product design, web, mobile and digital channel development.

It seems Green Dot is a breeding ground for other wannabe entrepreneurs.

In June, US mobile banking challenger Chime raised $70 million in Series C financing, led by Menlo Ventures.

Chime's co-founder and CEO Chris Britt also worked at Green Dot.

Antony Peyton

ThetaRay is AML way for ABN Amro

ABN Amro has partnered with ThetaRay in a five-year, bank-wide project to improve the Dutch bank's anti-money laundering (AML) and counter-terrorist financing (CTF) capabilities.

ThetaRay uses machine learning and mathematical algorithms to detect financial crime. The company will help the bank focus on making its post-transaction monitoring more effective and efficient.

ThetaRay's platform enables financial institutions to build customised solutions to identify anomalies in data sets in real time regardless of source.

The product has more than 15 years of academic research, and ThetaRay's approach to fraud detection is data agnostic and rules-free, using "the wisdom of the algorithm crowd" to deliver a cybersecurity solution.

Founded in 2013, ThetaRay was especially busy in the first half of this year, partnering with Singapore bank OCBC in March.

ThetaRay is headquartered in Israel and maintains offices in New York, London, and Singapore. The company has raised more than $30 million in funding, and includes Poalim Capital Markets (PCM), Jerusalem Venture Partners (JVP), and General Electric among its investors. Mark Gazit is CEO.

David Penn, Finovate

Mobile banking app preps for Amaiz-ing UK launch

A new mobile banking app, Amaiz, is gearing up for launch in the UK.

The app seems to fill in the niche that Monzo's prepaid card left – a Mastercard debit card that you can transfer money instantly and for free from debit and credit cards, Apple Pay or Android Pay. Users can also top-up by bank transfers, local PayPoint stores or by depositing cash at a post office.

The R&D team of Amaiz is based in St Petersburg, Russia, but its sights are firmly set on the crowded UK market and it has a business office in London.

Amaiz calls itself a neobank and its website doesn't offer a lot of details at the moment.

The firm intends to let users access and monitor funds in different bank accounts as well as make payments. Alongside fund protection and a 24×7 service, the app provides smart analytics to manage and monitor all payments, categorised by tags and create spending reports.

There is no specific launch data yet, and Amaiz is currently recruiting for more developers.

The company is led by Sergey Dobrovolskiy, its founder and CEO.

Henry Vilar

Smith & Williamson in tech overhaul with Avaloq

Smith & Williamson, a UK-based investment, tax and accountancy services firm, is believed to have concluded its system selection.

The contract has been awarded to Avaloq, *Banking Technology* understands. Avaloq declined to comment on the deal.

Smith & Williamson went to market for a new core processing system in H2 2016. Local consultancy Goodacre assisted with the selection.

It is understood banking tech firms such as Temenos with its T24 system and ERI with Olympic were evaluated alongside the Avaloq Banking Suite.

Smith & Williamson is the UK's eighth largest accountancy firm, with revenues of £244.6 million for the year ending 30 April 2016, and 1,700 people on the payroll.

It provides accountancy, tax, financial advisory, investment management and private banking services to a range of clients, from individuals and families to entrepreneurial businesses, mid-large corporates, professional practices and non-profit organisations.

Avaloq already has a number of clients in the UK, including Barclays Wealth, Canaccord Genuity Wealth Management, RBS's private banking subsidiaries Coutts and Adam & Co, and also Rothschild Private Banking & Trust.

Tanya Andreasyan

N26 aims for 100 more engineers by 2019

German challenger bank N26 aims to have over 100 engineers by the end of 2019.

The bank will open its second European office in Barcelona on 1 September, as it believes it will enable it to tap into a larger talent pool.

In total, N26 currently has more than 430 employees.

The new office in Barcelona will primarily be focused on product development and technology, but it will also give the bank's employees more flexibility in regards to their location.

Valentin Stalf, CEO of N26, says it wanted to "reach more talent and offer more international opportunities for a highly diverse workforce".

N26 established a team dedicated to the Spanish market in January this year, as it became one of the bank's core markets.

In March, N26 closed a $160 million Series C funding round. It has recently surpassed the milestone of processing €1 billion in monthly transactions with over one million customers.

Henry Vilar

Insurtech Kakau inks two deals in Brazil, eyes Europe

Kakau, an insurtech start-up in Brazil, has signed deals with insurance firms American Life and Generali.

Set up in 2016, Kakau provides a digital insurance platform that uses artificial intelligence (AI) technology and big data to offer more practical and economical insurance products for users. Kakau's platform comes with a virtual assistant, Anna.

The company says its offering is a "complete revolution in the product and user experience".

Its star product at present is a mobile phone loss cover, which is a popular option in Brazil, says Henrique Volpi, co-founder of Kakau.

He says the company's goal is to make the insurance a social and financial inclusion tool.

He adds that Kakau was fortunate to sign its first client, American Life (a small insurance firm), followed by a much bigger customer, Generali.

"The first two hundred meetings they are in doubt, but then it gets better," he jokes about the start-up's interactions with big firms.

He emphasises the company's commitment to making a social impact – from the outset, Kakau has partnered with Un Techo Para Mi Pais (TETO), a Latin American non-governmental organisation that builds emergency homes and runs social housing programmes.

Kakau is now looking to expand to Europe, and is in talks with a number of European firms. Volpi says the scheduled date for entering the European market is 2020.

Tanya Andreasyan

HSBC to invest $15-17bn in new tech

HSBC is looking for growth again as it plans to invest $15-17 billion in new technology.

In its latest strategy update, John Flint, HSBC group chief executive, says it will use its "size and strength to embrace new [unspecified] technologies" but adds that this is "subject to achieving positive adjusted jaws each financial year".

Flint wants the bank to make a mint and explains: "After a period of restructuring, it is now time for HSBC to get back into growth mode. The existing strategy is working and provides a strong platform for future profitable growth. In the next phase of our strategy we will accelerate growth in areas of strength, in particular in Asia and from our international network."

To achieve this mighty ambition, HSBC has eight priorities – some of which are explained below.

It will look for happy hunting times in Hong Kong by investing in the Pearl River Delta (PRD), the Association of Southeast Asian Nations (ASEAN), and "Wealth in Asia" (including insurance and asset management).

Like many others, it wants to tap into the China-led Belt and Road Initiative and the "transition to a low carbon economy".

Other stuff will see investment in digital capabilities and future skills, and look for partnerships. Same as all other banks.

The other goals are very vague – such as "turn around our US business" and "gain market share and deliver growth from our international network".

Throughout the period from 2018 to 2020, HSBC says its plan assumes its common equity tier 1 (CET1) ratio will be above 14%. The bank's CET1 ratio has been above this level for the last five quarters.

To achieve these financial targets, it aims to deliver mid-single digit growth in revenue, low to mid-single digit growth in operating expenses, and c.1-2% annual growth in risk-weighted assets (RWAs).

HSBC adds that it expects this to result in an improvement in reported revenues as a percentage of reported average RWAs from c.5.9% in 2017 to c.7% by 2020.

Back in April, HSBC was making plenty of noise about having spent $2.3 billion on improving its artificial intelligence (AI) and digital capabilities around the globe.

Antony Peyton

Scottish banking start-up Nexves readies for launch

Aberdeen-based start-up Nexves is flying the flag for democracy and preparing to unleash its financial platform which will operate like a bank account.

The idea is to let a "swarm of individuals" collectively act together in mutual self-interest. All investments are made from the interest accrued on the money deposited.

It will also simultaneously offer a network of data, which enables "everyone to lower their recurring monthly expenses" and "will be collected with users' costs negotiated down automatically".

Essentially it's an ecosystem of integrated products and services. Nexves doesn't offer any timelines yet, but says a suite of services will emerge which are "all interlinked yet independent". The start-up wants its account to replace intermediaries.

Like many other firms, its inspiration is rooted in a lack of love for big banks and the old order.

Christopher Herd, Nexves' founder, says: "Collectively we fund the banks. Their current accounts harbour our savings and expenditure while our benefits have eroded over time. How many people now pay 'account fees'?"

He adds: "Now we are charged for the privilege of storing our money in their institution. The same companies whose business model evolved from arbitrators of truth, to taking risks which equate to reckless gambling. Your capital still funds their pursuit of unfathomable riches, only you are now covering their exorbitant bonuses and losses too, even after feeling the pinch of currency devaluation due to the 2008 financial crash.

"Don't forget, not one of them was prosecuted for their reckless behaviour which flushed the economy down the drain. Their CEOs continue to pick up salaries in the millions, while simultaneously receiving an entitlement to options and shares which are worth even more. You're welcome."

I think you get the idea.

These are early days for Nexves as its website doesn't offer specifics yet on launch dates. However, it is asking for sign ups.

With regards to the launch date, Nexves told *Banking Technology*: "I suspect it will be in the next three-five months, at minimal functionality. Obviously it's very ambitious but we have several prominent and important people involved who we think will help us cross the chasm."

Along with being the founder, Herd is an ICO/blockchain consultant; and a business consultant/marketing and media manager for Front Letter – an enterprise operating within the real estate, restaurant and food industries in Aberdeen.

Antony Peyton

IBM criticism brings more blues to TSB tech issues

Oh say it isn't true Big Blue. IBM has brought more misery to TSB and its massive tech overhaul issues by saying the go-live criteria wasn't ready.

As reported in April, TSB's migration to new systems caused chaos with online and mobile banking. For over five days customers could not bank remotely and reported multiple problems with their accounts and transactions.

In an IBM report on TSB's IT problems, published by the UK government's Select Committee today (21 June), the revelations are not happy reading for the bank.

IBM says it has not seen evidence of the application of a rigorous set of go-live criteria to prove production readiness.

It would expect "world class design rigour, test discipline, comprehensive operational proving, cut-over trial runs and operational support set-up".

But in its view there were a limited number of services (e.g. mortgage origination, ATM and head office functions) that were launched on the new platform and a broader set of services to about 2,000 TSB partners as customers.

According to IBM, it has not seen evidence of technical information available to TSB, e.g. architectures, configuration and design documents, monitoring information, test outcomes etc.

Along with that, performance testing did not provide the required evidence of capacity and the lack of active-active test environments have materialised risk due to issues with global load balancing (GLB) across data centres.

A TSB spokesperson says: "The IBM document contained a preliminary work plan with very early hypotheses based on observations to date, that were produced after only three days of engagement with TSB, almost eight weeks ago. The content is therefore now very much out of date. The hypotheses were not final, nor were they a validated view of what went wrong or of the actions that have subsequently been taken. Without this context, this document could be misinterpreted to the detriment of TSB's customers."

Antony Peyton

UK start-up Yulife to bring life to insurtech

Yulife claims to be the first lifestyle insurance business in the world, and will launch later in the year offering life insurance plus wellbeing tools for businesses and individuals.

The firm uses game design and rewards to "give you the TLC (tender loving care) you need", but traditional life insurance lacks.

On the website, Yulife claims to draw from tech, psychology, wellbeing and behaviour change fields to create the product.

Yulife says it will draw data from other wellbeing apps to help users manage their insurance and provide them with rewards.

This upcoming insurer is backed by UK insurance company AIG Life, which will underwrite all insurances issued by Yulife.

The company was founded by Sam Fromson and Sammy Robin, who now hold the COO and CEO positions, respectively. Robin was the founding CEO of insurer Vitality Life.

"Rapid advances in consumer health technology and shifting attitudes mean that people want more from their insurance company," says Robin.

"We're a new type of insurance company that uses behavioural science and artificial intelligence (AI) to help build deeper and more rewarding relationships with our customers," adds Fromson.

Yulife is based in Camden, London, with a team of 20 people at this moment.

Henry Vilar

RBC boss sees CA$3.2bn tech spend in 2018

Royal Bank of Canada's (RBC) president and CEO Dave McKay has said at an investor meeting that the bank estimates it will spend CA$3.2 billion ($2.4 billion) in technology during 2018.

This number is an increase from last year's CA$2.9 billion, or even CA$2.6 billion in 2015.

The CEO highlights that CA$520 million "will be moved from 'Run' to 'Change'", as the bank is looking for ways to invest in transformation to lower operational costs.

The bank also states that throughout the past four-year period, infrastructure and support costs remain relatively flat.

RBC also estimates to double down on cybersecurity spend. This is an important area, since a catastrophic breach could make the positive profit and savings projection collapse.

The bank estimates, given the past four-year period trend, to save around CA$430 million through increased automation, system consolidation and "re-use".

Conversely, around CA$400 million will be redirected into next-gen delivery platforms, data and artificial intelligence (AI) tech, APIs and modularity, and cloud and other infrastructures.

These investments aim to reduce operational costs in the future, at the same time the banks keeps up with the 33% year-on-year growth in mobile transactions and 8% year-on-year growth in core systems transactions.

For reference, the bank explains that, by "next-gen delivery platforms", it refers to its mobile banking app NOMI, its wealth management app MyAdvisor, its capital markets service Aiden, and its investor and treasury services.

It has also invested CA$225 million over four years in its AI and data analytics platform, and expects its data lake to grow tenfold in the next two years.

Across the pond, HSBC has committed to a huge tech investment too (see p9).

Henry Vilar

NEWS

Visa reveals over 5m payments affected by June outage

Visa has disclosed that its pan-European outage at the start of this month affected 5.2 million card transactions, almost half of which were in the UK.

As reported in June, Visa said that some card payments were failing across Europe. In the UK, bank customers were still able to obtain cash from ATMs.

On 2 June Visa resolved this "technical issue", which "was the result of a hardware failure in one of our European systems and is not associated with any unauthorised access or cyberattack".

In the latest revelations published today (19 June), the details have come to light in a letter from Visa to a UK parliamentary committee. It's a common occurrence for these committees to investigate many things.

According to Visa, the issue went on for ten hours from 1 June.

Visa Europe chief executive Charlotte Hogg writes: "Overall, for cards issued both in the UK and elsewhere … 51.2 million Visa transactions were initiated and sent to Visa's European systems for processing."

She says: "Of these, 5.2 million failed to process correctly".

The glitch was the result of a "very rare partial failure" of a switch in one of Visa's data centres. It has since been fixed.

In terms of the UK, Visa says 27.6 million transactions were made during the outage – and 2.4 million failed to process properly.

"At its peak, the disruption affected people in the midst of returning home from work, socialising in restaurants and pubs, and doing end-of-day shopping," Hogg explains.

She adds: "Visa, together with our financial institution partners, has quickly implemented a compensation programme for cardholders."

Also in early June, and just after the outage, Hogg had to begin her presentation at Money20/20 Europe in Amsterdam with an apology for these events.

She reassured customers that there was no cyber breach.

Antony Peyton

Wells Fargo under fire over remote deposit capture patent

The United Services Automobile Association (USAA) is suing Wells Fargo on grounds of intellectual property charges for unspecified damages, over USAA's remote deposit capture patents.

San Antonio-based USAA claims to have invented such tech, and thus started demanding licensing fees from banks around a year ago.

"We've been abundantly patient with Wells Fargo," Nathan McKinley, a USAA vice-president and its head of corporate development, said in an interview with American Banker. "Now is the time for us to get the court's assistance."

Wells Fargo hasn't commented yet on the matter.

USAA targeted Wells Fargo as it's one of the biggest users of remote mobile deposit capture and has failed to license the technology while benefitting from its use, claims USAA.

"It is improper for Wells Fargo to use, without permission, patented technologies that USAA has spent immense resources to invent, develop, implement, and perfect," USAA said in a complaint filed in US District Court for the Eastern District of Texas.

USAA claims it has suffered "immediate and irreparable harm".

USAA provides banking services to current or former members of the armed forces, and is largely considered a digital bank. Its customers are often deployed around the world.

McKinley referred to the technology as "one of the most significant advances in digital banking within the last decade".

USAA developed its technology internally in 2005, before launching it to customers in 2006. USAA has also had legal quarrels with Mitek over patents related to mobile RDC technology, which ended in 2014 with neither side paying the other.

Henry Vilar

Infosys powers Santander UK's core banking revamp

Santander UK has turned to Infosys' Finacle for the launch of a new inter-bank cash management system for its corporate customers.

As *Banking Technology* reported exclusively last year, Santander UK was embarking on a core banking software overhaul.

The bank has a multitude of systems, which it inherited from two UK banks, Abbey National and Bradford and Bingley, which were taken over by Santander. Among major and long-standing suppliers is Finastra (ex-Misys) with its Equation core banking system.

Now Santander says it will introduce the new portal.

The bank will use Finacle's digital offerings, which includes Finacle Online Banking, Omnichannel Hub, Payment Solution and Liquidity Management Solution (LMS).

Bart Timmermans, head of global transaction banking (GTB), Santander UK, says this deal "represents a significant part of GTB UK's channel strategy, helping to prepare the bank for its shift towards serving its digitally enabled corporate clients".

According to Infosys, LMS will enable multi-bank reporting and cash management capabilities including sweeping, target balancing and notional pooling.

Corporate treasurers will be able to design liquidity structures. The open APIs will also enable corporates to embed cash management services within their own ERP solutions.

The Finacle solution suite will be made available in a cloud hosted environment.

Antony Peyton

Westpac moves all core banking to cloud

Westpac has made the jump and moved all its core banking applications into its brand new private cloud environment, which will allegedly make its development ten times faster and three times cheaper.

This move may lead the bank to save millions of dollars in technology costs each year and speed up its product roll-out considerably.

The move to cloud started last year with a partial move to the cloud. CEO Dave Curran tells The Australian Financial Review that even though they were planning moving 20 applications, the number is now over 30.

The company reports over 100 automated integrations, which would considerably increase the efficiency and reduce manual work.

This move is in preparation for open banking, with mainly regulatory apps having been moved, as well as a giant customer service hub.

Westpac's new private off-site cloud is based on IBM Cloud technology, and is housed in two Sydney IBM data centres.

Through the bank's hybrid-platform-as-a-service (HPaaS) model, the bank aims to make systems work together whether they are hosted in-house, in its offsite private cloud or on public cloud platforms.

The bank plans to make sure that every single one of its hundreds of applications is transferred onto the cloud, without exceptions. 70% of these apps will be transferred over the next three years. The CEO reports a 40% saving in set-up costs on the cloud so far.

Curran says Westpac would be more resilient as it would have two separate environments running concurrently, as a response to National Australia Bank's outage in June .

The CEO also remarks on the bank's focus on keeping customer data secure on the cloud.

The bank is a long-standing user of the Hogan core banking system from US-based CSC. In 2010, the bank embarked on a lengthy upgrade of the legacy core to the newer offering from CSC, Celeriti.

Henry Vilar

French savings firm Cashbee preps for flying launch

Paris-based Cashbee, a business-to-consumer (B2C) fintech company providing automated, digital cash deposits and savings, is readying for launch.

Cashbee says it plans to offer users the best promotional offers on the market without them having to change banks. Users' money remains in an account in their name.

According to the firm, customers can sign up with information that it needs to open bank accounts in that person's name.

Its algorithm then identifies the best banking offers (such as premiums or boosted rates). Money is deposited into the highest paying account.

There is no launch date yet but it says it will go live soon. The start-up is calling for interested parties to sign up on its site. Cashbee says its solution is available to French individuals and families.

The company was founded by three individuals – Chaker Nakhli, Cyril Garbois and Marc Tempelman.

Nakhli has worked as a CTO at Kudoz and Wizypay. The former is a mobile app that matches people with job opportunities. The latter is a B2B prepaid and gift card platform.

Garbois is currently founder and MD at 101 Advisory – a team of consultants and technology advisers.

Tempelman has a lot of experience with Bank of America Merrill Lynch. This includes vice-chairman of global capital markets; and MD, co-head debt capital markets and corporate banking (EMEA).

Antony Peyton

Nationwide seeks start-up action with £50m fund

Nationwide is launching a new £50 million fintech fund to support its future tech strategy and the society's members.

Investments will focus on creating long-term partnerships with companies that can help develop products and services, which means delivering benefits to members over profits alone.

Nationwide claims that in the last year it has grown the number of its active mobile banking members by 44%, with 200 million more logins, which will be driving the aim of its investments – in spite of some occasional down time.

The first investment has been announced, and will see the proptech start-up acasa receiving an undisclosed amount of funding. Acasa is a home management platform which automates and streamlines the process of moving in, managing and moving on for the resident, utility companies and landlords. The platform will become a fully-fledged marketplace for households.

Tony Prestedge, Nationwide's deputy CEO, says: "By investing in early stage start-ups, we can be at the forefront of helping develop innovative products and services that will benefit our members both now and in the future, allowing us to deliver our ambitious future technology strategy."

As part of the investment, Nationwide will have a senior member of staff with relevant experience to provide support, guidance and expertise to the start-up.

There are seven main themes that the fund will be looking at: house and home; personal data and identity; financial wellness; communities and society; Banking-as-a-Platform; operational efficiency; and "new segments".

Henry Vilar

Georgia's TBC Bank launches digital neobank Space

Georgia's TBC Bank has unveiled its digital and autonomous neobank, Space.

TBC says the fintech-inspired initiative was taken from concept to launch in eight months. Software-as-a-Service (SaaS) core banking engine Mambu is powering Space.

Space provides customers with a range of retail banking services including loans, saving products and payment cards.

"A year ago, several TBC team members decided to create a neobank that exists only as a mobile app, without branches and physical presence," says Nika Kurdiani, Deputy CEO at TBC Bank. "TBC, in a way, created its own competitor. We think this challenge brings a new reality not only to TBC but also to the Georgian banking sector. It aims to change the way people access their daily financial services."

Lasha Gurgenidze, project leader at Space, adds: "We put a special focus on differentiating by design, customer care, price transparency and instant service delivery. We are a fintech in every sense from people and processes, to our culture. The biggest advantage of our model is the ability to leverage the resources and experience of TBC Bank while operating independently."

Gurgenidze adds that Mambu is API-driven which was "strategically important" for the integration of products and features and "that is the power of the right technology".

This is Mambu's first client in Georgia.

Antony Peyton

LeasePlan Bank in major tech overhaul with Ohpen

LeasePlan Bank, the online savings bank based in the Netherlands, has chosen Ohpen to upgrade its whole core cloud banking engine, Pieter Aartsen and Angelique Schouten, global board members at Ohpen, tell *Banking Technology*.

The bank will do a full-stack upgrade of its core engine and all other tech, which moves away from Oracle FSS's Flexcube, an on-premises system onto Ohpen's cloud-native engine.

This move will cover both the Dutch and German operations of the bank. Although the bank is headquartered in the Netherlands, a part of its client base is based in Germany.

The implementation began on 4 July. The bank's whole system, bar the website, will be provided by Ohpen's tech. For the bank it is the retail savings and deposits IT infrastructure, which is what LeasePlan Bank specialises in.

"Migrating LeasePlan Bank's customers to the Ohpen core banking platform will reduce the complexity of their savings and deposits IT architecture and make LeasePlan Bank more agile," says Aartsen.

Ohpen has been gaining traction over the last few years. Knab, a challenger bank subsidiary of Aegon, moved to Ohpen's core from Sopra Banking Software's system. Aegon is also a customer of Ohpen.

Former Delta Lloyd Bank, which was taken over by Nationale Nederlanden (NN) Group last year, also made the jump onto Ohpen's tech, alongside NN Bank. On the way out are Temenos with its T24 system and Able (a local banking software provider).

When asked about the reason for this momentum, Schouten cites Ohpen's "power of one" motto.

"We have one core banking engine running in the cloud, one code base, one version of our platform for all countries. The fact that it's one solution and cloud-based means that it is faster, more reliable and we can release our new software to all clients at the same time, which happens every month," she says.

Aartsen adds: "We were the first ones going all-in cloud, fully cloud natives and programmed a whole new bank from scratch and have been running it in the cloud and offering it as a Software-as-a-Service (SaaS) for nine years now.

"This means that our tech is now future-proof, and we can adapt it in the future without the deployment demands of on-premise architecture."

Henry Vilar

Coventry BS selects Temenos for digital revamp

UK-based Coventry Building Society has chosen Temenos' T24 core banking system for a digital revamp.

As *Banking Technology* reported in 2016, Coventry BS had embarked on a tech modernisation project and was looking for a new core system.

Earlier this year, Coventry BS had more than 80 IT roles up for grabs at its head office as its overhaul was ramping up.

In the latest development, the society has opted for a front-to-back revamp using T24, Temenos Channels, Financial Crime Mitigation and Temenos Payments Hub solutions.

Peter Frost, chief operating officer, Coventry BS, says Temenos has a "worldwide reputation for robust, innovative banking systems" and its platform will "help drive simplicity and efficiency".

This is Temenos' first building society deal in the UK.

The society is the third largest in the UK, with total assets of more than £34.1 billion, 1.4 million members with savings accounts, and 350,000 members who are borrowers.

Coventry BS is a long-standing user of the Mortgage and Savings Suite (MSS) from Sopra Banking Software for its core processing; and FIS/Sungard's Ambit Treasury Mangement/Quantum system for treasury operations, *Banking Technology* understands.

It is understood Accenture is the implementation partner.

Antony Peyton

Blockchain – the time is right, but we've only just started

In an exclusive interview, *Darryl Twiggs*, SVP Strategic Initiatives at financial transaction lifecycle management solutions provider SmartStream, discusses why now is the right time to embrace blockchain.

Good timing is everything. Too soon and potential failure looms. Too late, then it could be a game of constant catch-up.

For Twiggs, SmartStream has taken the right approach, and moment, when it comes to using blockchain.

"We've been monitoring blockchain for a couple of years now. Looking from a technical point of view initially. Secondly, at the potential impact it would have on financial services overall."

Now it sees blockchain as a "fundamental revolution" for back office to middle office processing.

To SmartStream, the technology principle of a decentralised central ledger, immutability and a complete audit trail has "huge benefits" and the option to streamline fractured processes.

For those who may wonder if there will always be a requirement for reconciliation, he is very clear on the subject.

"I often smiled when some of our clients very cheekily said to us – 'with blockchain we'll lose the need for reconciliations' – and I said to myself – 'will that then suddenly improve the fat finger of the trader who puts an extra zero on the trade value?'"

He states that reconciliations will move from a post-settlement operation to real time.

HERE'S PROOF

SmartStream has been looking at how it can participate for a while.

Twiggs explains that SmartStream products have been architectured for cloud operations for more than ten years. "A blockchain to us is another manifestation of cloud technology."

Last year, it did a proof of concept with Ripple. It integrated its liquidity management solution to take the payment off the block – and updated its solution with a transactional balance and validate the position on the block itself.

Darryl Twiggs, SmartStream

> "Blockchain now is starting to get to the point where it is robust, fully encrypted, secure… and it can perform."
>
> **Darryl Twiggs, SmartStream**

DON'T DISMISS SWIFT

But there is also a note of caution for banks.

"In my view they have evaluated the tech capability but they haven't understood, yet, the pure impact potential.

"They've been looking at something very narrow. So they often looked at interbank payments. Well, Swift is an interbank payments system, and they still have private network payments and RTGS. Just switching technology is not enough.

"If you look at more complex situations – which end up in a payment – then you really start to see the benefits."

ON THE WAY

In terms of specific plans and what lies ahead, Twiggs says it has been validating its data, and its solutions will integrate – notably with Hyperledger Fabric.

The result of that evaluation is that it set up an innovation lab, with blockchain as one team and artificial intelligence as another.

It has always had an R&D team but now it is "externalising" to do "greater validations" without impacting its production environment.

SmartStream is looking to set up an innovation office in Cambridge (UK), following a first one in Vienna.

The firm can offer a lot. Twiggs says its solutions support the principle of endorsement and message exchange. In addition, it can provide services, such as network operations.

Twiggs comments: "We are over the hype that was generated by cryptocurrency. All the central banks have made a statement, in terms of regulatory jurisdictions, and have also produced reports in the last six months, in how they view blockchain as an operating network. They are in favour of it."

SmartStream is looking to launch its offerings next year. For Twiggs this is most definitely the right time.

"To our business and customers, we saw that blockchain now is starting to get to the point where it is robust, fully encrypted, secure… and it can perform." **bt**

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La vie en rose

The French fintech market is going full speed ahead. *Cécile Sourbes* investigates.

Arc de Triomphe de l'Étoile, France

The French fintech market has come a long way. For years, the firms willing to launch in France found it difficult to make a place for themselves, often struggling with the tight regulatory oversight, the low level of funding and the mindset of French customers who preferred to stick with their traditional banking providers. But, as new regulations came into force and customers started to lure alternative financial offerings, France eventually embraced the fintech disruption.

"Contrary to what most people think, France was among the early adopters of the digital financial system with the creation of the first digital banks in the 1990s," says Alain Clot, founding chairman of France Fintech, the association representing fintechs in France and abroad. "But, it is true that it took some time for the sector to take off. Today, though, firms are active in every sector ranging from payments to accounts aggregation and from insurtech to robo-advisors and crypto-asset wallets."

> "Contrary to what most people think, France was among the early adopters of the digital financial system with the creation of the first digital banks in the 1990s."
>
> **Alain Clot, France Fintech**

France currently counts some 300 fintechs. And, if the level of fundraising is any indicator, the local fintech market seems in good shape with a total of €318 million raised in 2017 across 64 deals, against €172 million the year before, according to a recent report from KPMG. In comparison, French firms raised only €5 million in 2010.

So, how did the French fintech sector really launch?

THE REGULATORY BOOST

For market participants, the introduction of the first European Payment Services Directive (PSD1) in 2007 – which was transposed into French law in 2009 – served as the trigger point. At the time, the European Commission (EC) was seeking to make cross-border payments as easy and secure as possible and looked to introduce more competition in a sector that was until then the banks' core remit.

"Back then, the only option for you to make a payment was to go through your bank," says Mikael Ptachek, head of the fintech practice at KPMG in Paris. "But with PSD1, a number of fintechs suddenly emerged and they started to process cash flows without getting a full banking licence."

> "Our role as a regulator is to make sure we have a level playing field between firms offering the same type of services. As such, we don't distinguish fintech from incumbent players. We simply think that, in most cases, new players need regulatory responses more than regulatory changes."
>
> **Domitille Dessertine, AMF**

Requesting a banking licence is often seen as a daunting process, in part due to the heavy capital requirements involved. Instead, PSD 1 allowed the new entrants to simply register as payment institutions. With this new status, firms such as the payment platform Leetchi, the peer-to-peer (P2P) payment app Lydia, the bank accounts aggregation service Linxo and the new digital bank Compte Nickel emerged.

A second wave of regulation in 2014 helped boost the French fintech market. At the time, the Ministry of Economy decided to regulate the crowdfunding sector with the introduction of two new statuses. On one side, the Conseil en Investissement Participatif (CIP) aimed to regulate equity crowdfunding platforms, which falls under the supervision of the financial markets and securities regulator, the Autorité des Marchés Financiers (AMF).

On the other side, the regulation created the Intermédiaire en Financement Participatif (IFP) for crowdlending platforms. These are supervised by the financial services regulator, the Autorité de Contrôle Prudentiel et de Résolution (APCR). It's under the IFP status that Lendix, one of the most promising fintech in France which raised another €32 million in June this year, launched in September 2014.

"We believe that those regulations are a clear advantage for the new entrants because it allows them to present themselves as a regulated entity, which is reinsuring for both the customers and the investors," says Pierre Bienvenu, a member of the ACPR Fintech Innovation Unit.

NEW REGULATORY OVERSIGHT

For many fintechs, though, the regulatory process has sometimes been a path full of roadblocks. This was the case for Cyril Tramon, who launched WeShareBonds, a lending platform for SMEs in Paris between July 2015 and May 2016.

"It took the regulator several months to understand our project because they had never seen that before, " he says. "It was a constant back and forth and, to be fair, it wasn't a process whereby we could talk to the regulator and discuss with them. When we had a question, the regulator decided when and whether they had time to answer it."

To respond to the new entrants' needs, both the AMF and the ACPR set up dedicated teams in 2016. The teams each made up of four members are in charge of taking the start-ups through the heavy regulatory process involved with their activity. But, as Domitille Dessertine, a member of the Fintech, Innovation and Competitiveness team at the AMF points out, the teams are not here to re-write the rules for the newcomers.

"Our role as a regulator is to make sure we have a level playing field between firms offering the same type of services," >>

Eiffel Tower, Paris

she says. "As such, we don't distinguish fintech from incumbent players. We simply think that, in most cases, new players need regulatory responses more than regulatory changes and that's why we set up this team."

Many fintechs in France welcome the move and recognise the help both the AMF and the ACPR have provided. This, they say, contributed to their successful launch.

But the regulatory changes were not the only factor behind their successes. Just like in any other market, French firms had a knack for exploiting customers' frustration with the banks' old services.

FIERCE COMPETITION

"My business partner and I really tried to put ourselves in the shoes of the customer," says Bruno Van Hastedaele, co-founder of the banks account aggregator Linxo in Aix-en-Provence. "What they wanted to know was how much they had on their various bank accounts and how much they were spending. But, no bank offered that service back then. That's how our app was born."

Van Hastedaele insists on the fact that Linxo was not created to compete with banks but simply to bring a new service to the market. Still, banks saw the arrival of those services from a slightly different perspective and a number of them decided to pick up a fight with the new entrants.

This led to some ludicrous situations like in 2013, when one of the two founders of another accounts aggregation service, Bankin, received a surprising phone call. The caller, a bank employee, called to warn against the Bankin' service, saying it was not provided by their bank and that users would not be reimbursed in case of fraud. What the caller failed to realise, though, is that he was actually talking to the company's founder.

Pierre-Antoine Dusoulier, former CEO of Saxo Banque France and founder of IBanFirst, a firm that specialises in cross-border payment for companies, concedes that the relationship can sometimes be "difficult". But, to him, the stance taken by some banks is mainly due to the "schizophrenic situation" they are in. "They don't want to share their business with people like us," he says. "But at the same time, they realise that their customers come to us because traditional banking services are not meeting their needs."

> "In the first place, they found our service too small to be relevant. But then, we started to get some sizing traction and banks competed fiercely with us."
>
> **Philippe Gelis, Kantox**

Philippe Gelis, Kantox

Things are changing, though. Over the recent years, dawned with the realisation that they could potentially benefit from the solutions developed by the fintechs, banks have started to enter into partnerships, slowly moving towards a "coopetition" process.

TOWARDS "COOPETITION"

This is what's happening with Kantox, an FX solutions provider. Until 2016, the firm focused mainly on providing competitive and transparent fees on foreign exchange transactions to SMEs. To that extent, the firm was in direct competition with the large market makers out there. "In the first place, they found our service too small to be relevant," says Philippe Gelis, one of the co-founders of the firm. "But then, we started to get some sizing traction and banks competed fiercely with us."

Kantox therefore decided to revert the trend. Instead of competing on price, the firm would now compete on technology. "Over the past 12 months, some banks have started to really value the technology around the automation of hedging we have built," Gelis says. "The idea for them is to access our solution to bring more value to their customers and to increase the »

COUNTRY SPOTLIGHT: FRANCE

efficiency of their trades. So, in April, we started partnering up with eight banks and we have launched a proof of concept with two of them already."

But these partnerships are not one way and the fintech have a lot to gain too. The interest for them is twofold. First, they can learn about regulatory compliance and large scale processing from banks. Second, and more importantly, they can gain access to new clients.

"If clients come through the banks, the cost of acquisition will be much lower because we don't really have to prospect," Gelis goes on to say. "On top of that, banks' customers are larger than the ones we traditionally serve and they are based in different geographies, which is a good way for us to expand outside of Europe."

BANKS TRANSFORMATION

This gives some room for maneouvre to the fintechs. But this also poses some risk to the banks. If the new entrants can gain access to banks' customers, they may well bypass the traditional players in the long run. At that point, banks will simply become an infrastructure provider with all the smaller firms plugging into the platform to provide their services directly to the clients.

Ronan Le Moal, general director of the regional bank Arkéa and former CEO of the digital bank launched by Arkéa in 2001, Fortuneo, acknowledges the risk. "Being in 'coopetition' is being able to work with a fintech and help the firm grow while providing services it needs. But we should be careful not to lose the customer relationship we have forged over the years. Otherwise, we'll simply become a commodity."

To avoid this phenomenon, banks have launched their own digital labs. This, they say, is part of their transformation process and the labs will help them set up innovative solutions for their clients. BNP Paribas, Société Générale, Crédit Agricole and others have all invested millions of euros in those project incubators over the recent years.

But for some market participants, the move, although promising, is nothing more than a vain marketing effort. "For banks, investing in those labs is just a way to show investors and market analysts that they invest in innovation but their culture and DNA is the exact opposite of what innovation requires: flexibility and the capacity to move fast," says Gelis.

Many banks have tried to develop their own offerings, especially in the payment sector with the launch of new digital banks. But some have failed. "On average, it took banks between two and three years to launch their new service but by the time they were ready to launch it, it was already out-of-date because the market evolves so fast," says one head of the Fintech practice at an advisory firm in Paris.

That's why banks have started to acquire a number of start-ups. The banking group BPCE for instance, bought Dalénys – a start-up offering payment solutions for e-commerce websites – last year for €160 million.

Other banks have adopted a similar line of reasoning. BNP Paribas acquired the digital bank Compte Nickel in 2017. The same year, La Banque Postale bought the crowdfunding platform KissKissBankBank, while in 2015 Arkéa acquired Leetchi.

OVER-VALUATION

But all these successful exit strategies should not be taken for granted, banks warn. According to various senior executives *Banking Technology* talked to as part of this article, if the French fintech firms are successfully raising large rounds of funding, it's simply due to the high volume of liquidity available in the market at the moment.

> "We should be careful not to lose the customer relationship we have forged over the years. Otherwise, we'll simply become a commodity."
>
> **Ronan Le Moal, Arkéa**

> "We are in a phase now where fintech are raising some over generous funding round valuations but the reality is that only a few players are launching innovative models that have a true potential such as in the insurtech and regtech sectors."
>
> **Hugues Le Bret, Compte Nickel/ BNP Paribas**

"We are in a phase now where fintech are raising some over generous funding round valuations but the reality is that only a few players are launching innovative models that have a true potential such as in the insurtech and regtech sectors," says Hugues Le Bret, founder of Compte Nickel and now a member of the executive board of BNP Paribas in charge of digital and fintech.

Le Bret takes a strong stance on the matter. According to him, big industry players only acquire companies that have an economic model, a strong growth potential and a market share. On the face of it, he says, only three or four firms out of ten will have a successful exit strategy in the next couple of years. The others will fail. But this is a necessary process, he adds, as it will allow the market to go back to a more "rational level".

The scalability of fintech firms are a real issue. This is particularly true for the payment sector where several actors are now turning towards the business-to-business (B2B) market, which holds greater prospects than the crowded business-to-consumer (B2C) space.

"There are strong opportunities in the B2B market and the shift undertaken by some fintechs at the moment towards this model clearly reveals the difficulty they face to expand further in the B2C market," says Raphaël Krivine, director in charge of client relations at AXA Banque in Paris.

On the face of it, the second European Payment Services Directive (PSD2) could serve as a breath of fresh air for some of them. The directive, which was transposed into French law in January 2018, requires banks to provide third party payment providers connectivity to access customer account data and to initiate payments. Three fintechs in France are already PSD2 compliant: Bankin, Linxo and Budget Insight.

Once again, French firms could have a lot to gain. But as Fabrice Odent, head of the banking practice at KPMG in Paris, says, PSD2 could also be positive for banks as "this will push them to rethink their customer service".

TOP FRENCH FINTECHS BASED ON THE TOTAL VOLUME OF FUNDS RAISED BY DECEMBER 2017

Payment services	Financing services
Hi Pay €70m* Dalenys €38m Kantox €21.5m	Younited Credit €103m Lendix €19m FinexKap €12m
Banking services	**Investment services**
Compte Nickel €39m Linxo €22.5m Qonto €12m	Brickvest €10m Yomoni €8.5m Grisbee €3m
Insurtech	**Regtech**
Shift Technology €34m Alan €12m +simple.fr €12m	Payfit €19m Captain Contrat €5m SECAB €5m
Blockchain	**Advisory services**
Ledger €69m Stratum €9m Ugloo €1.3m	Tinubu Square €73m Paytop €7m Creancio €5m

(*) equivalence in funds raised during the IPO in 2015
Source: KPMG

Autorité des Marches Financiers, Paris

FRANCE SET TO REGULATE ICOS

Crypto assets have been under the spotlight in France in recent months. Last October, the Autorité des Marches Financiers (AMF) launched a public consultation on the regulation of initial coin offerings (ICOs) in a bid to encourage the development of a new type of fundraising in the country.

The French government's move towards ICOs contrasts sharply with the stance taken by countries such as China, Russia or even the US. The US Secretary of the Treasury, Steve Mnuchin, said in January this year that he and other regulators were looking into the possibility that cryptocurrency could be used in money laundering activities due to the anonymous nature of the transactions.

The French Treasury acknowledges the risk but argues that this situation justifies the need for a regulatory framework.

"ICOs can be very risky for investors and with no regulatory oversight, it's true that these types of fundraising can lead to money laundering," a source at the Treasury says. "That being said, we must also admit that ICOs are a major source of fundraising for start-ups and SMEs. A lack of regulation could be detrimental for both the issuers who would have no other option but to launch their project in a country that already has a regulation in place and for the investors who could be subject to fraud."


Domitille Dessertine, AMF

The consultation launched by the AMF aims to bring more clarity over the way France can better regulate ICOs.

The AMF lined up three options in the consultation paper. First, the regulator suggested to produce some best practices for market players to comply with. Second, the AMF proposed to extend the scope of the existing regulation to treat ICOs as public offerings of securities. Third, the AMF proposed to develop a specific and tailored regulatory model with the launch of a licence.

"For the third solution, we had two separate options," says Domitille Dessertine, a member of the Fintech, Innovation and Competitiveness team at the AMF. "The first one was to make this new regulation mandatory, meaning that all those new players who wouldn't have received a regulatory approval would not be able to operate in France. The second solution consisted in making it optional, meaning that all the issuers who want to obtain a regulatory approval will be able do so provided that they meet a certain number of predefined requirements."

The AMF received 82 responses in total. The majority of respondents opted for a specific and tailored regulatory framework and for this new regulation to be made optional.

The results of the consultation are now in the hands of the French Treasury.

The Treasury confirmed to *Banking Technology* that a licence will be created to insure that the issuer meet some criteria such as the full disclosure of the project related to the ICO and its advancement and the role of escrow agent to hold the assets.

However, the Treasury warns that the licence will not guarantee the success of the ICOs. "This will be the sole responsibility of the investor," the source at the Treasury adds.

The Treasury goes on to say that the AMF will be in charge of drafting a list of issuers operating with the licence and will update it regularly.

The details over the licensing will be part of the new action plan for business growth and transformation Act the French government is currently putting together and which should be introduced before the end of the year. **bt**

Cécile Sourbes

SPOTLIGHT: ARTIFICIAL INTELLIGENCE

Right place, right time

Singapore, Helix Bridge

Banks in Singapore take the lead on artificial intelligence (AI) training, writes *Cécile Sourbes*.

More than ten years ago, Singaporean banks, like many of their counterparts around the globe, started to invest in data analytics capabilities. These tools, they said, allowed them to understand their customers' needs and to tailor services they were not able to offer before.

A decade later, with the advent of AI, banks are now contemplating the idea of applying new technologies to prevent fraud and even reduce the volume of non-performing loans on their balance sheet. But for any bank willing to go down that path, making sure that their employees understand the full implications of AI, is key. And now seems like the right time.

"The question of when to 'cross the chasm' to learn about new and deep technology is always one of timing," says Aye Wee Yap, head of learning and development at OCBC. "Too early and employees may find it too theoretical or abstract. Too late and you're in trouble as you will lose the first mover advantage.

"I feel that now is the right time. First, because the technology has been commercialised with specific useful applications. Second, because we have already deployed AI to various business operations and there is a growing interest among our employees to understand what AI really means and the impact AI can have on their business."

Earlier this year, both the United Overseas Bank (UOB) and the OCBC Bank in Singapore announced their intent to invest in training sessions in AI for their staff.

The decision comes at a time when consultancy firms and banks themselves have tried to put figures behind the impact of AI. In a recent note entitled "Is AI the next revolution in retail banking?", UBS strategist Philip Finch revealed that the new technology could lead to a 3.4% revenue uplift and cost savings of 3.9% over the next three years. The figure was based on an UBS Evidence Lab survey of 86 banks.

BUSINESS SKILLS

Thus, more than the technical aspect of AI, what banks are trying to harness with those trainings is the business implications.

"I think the banks have come to the realisation that having a group of very smart people in a room building an algorithm is good but it's not sufficient," says Dr David Hardoon, chief data officer at the Monetary Authority of Singapore (MAS).

"There is the need to understand and translate AI into business actions. In short, how can bank employees ascertain the need to use AI or not and what value does it bring to them as a business? Now it's the issue of having the ability to train potentially hundreds if not thousands of people to have that acumen."

OCBC has already committed up to 1,000 training places in AI. On its side, UOB said that, depending on the seniority of their employees, the learning and development journey will be tailored to their need with a course designed to be completed between three to six months. The course itself will consist in several modules, which a focus on the role of AI technologies, the way financial institutions can implement AI and the application of AI to various business lines.

But the question is how can banks deploy AI to fully benefit from it?

Dr David Hardoon, Monetary Authority of Singapore

"We want to create a comprehensive ecosystem for AI. And, an extremely important part of that ecosystem is training."

Dr David Hardoon, Monetary Authority of Singapore

ENHANCING CUSTOMER EXPERIENCE

The most obvious business potential comes in customer engagement.

"AI will be making our customer interaction a lot more personalised, predictive and natural," says Janet Young, head of group channels and digitalisation at UOB. "We can do so by using chatbots as digital assistants, which allow us to analyse our customers' responses and therefore better anticipate their needs."

OCBC has also started to deploy AI for customer engagement. In order to avoid the lengthy process which consisted in authenticating each customer going through its call centres, the bank started to use a voice biometric technology in 2015. "We became the first bank in Singapore to do so," says Yap. "This technology, which requires us to process data and understand them via the use of machine learning and other analytics tools, enables customers to use their voiceprints to authenticate banking requests such as card balances, latest transactions and the status of deposited cheques."

OCBC went one step further in its mission to make the customer experience as smooth as possible by adopting a voice recognition option in 2016. "This technology reduces the number of options needed to be entered sequentially on

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"AI will be making our customer interaction a lot more personalised, predictive and natural."

Janet Young, UOB

Janet Young, UOB

Singapore Business District

> "The question of when to 'cross the chasm' to learn about new and deep technology is always one of timing. Too early and employees may find it too theoretical or abstract. Too late and you're in trouble as you will lose the first mover advantage."
>
> **Aye Wee Yap, OCBC**

the keypad to get the service required," she adds. "It also reduces the number of instances where the customer's call is transferred to the wrong agent."

But when it comes to data, one must ensure the responsible use of analytics. To that extent, the MAS brought together a group of thought leaders and practitioners in data analytics earlier this year. The group called the Fairness, Ethics, Accountability and Transparency (FEAT) committee, will be in charge of developing a guide that will set out key principles and best practices for the use of AI and data analytics for financial institutions and fintech firms in Singapore to follow.

"There is a responsibility within the organisation to make sure that there is fairness, accountability and transparency over the use of data," says Dr Hardoon. "So what we are trying to do is make sure that certain due diligence within financial institutions is taking place."

The guide is currently being drafted and will be ready by the end of this year, the MAS said in an announcement in April.

Aye Wee Yap, OCBC

IMPROVING P&L STATEMENTS WITH AI

Another business potential of AI comes in credit assessment. UOB is now able to run credit processing and credit decisioning by using a data-enriched AI-powered credit decisioning tool.

"Obviously, this will not take over the judgement of the credit provider but the tool can support and speed up the decision making process for credit," says Young. "This can reduce the volume of non-performing loans and, ultimately, improve the overall loan profitability."

Dr Hardoon at the MAS confirms that improving banks' balance sheets is the outcome everyone is hoping for.

But a dilemma remains. As banks apply AI to credit assessments, will they still have the ability to extend loans to companies or individuals who are just starting up and who are at a higher risk than someone else? In short, will AI still allow a certain degree of risk appetite? After all, it's not unreasonable to think that if the technology picks the customers itself, the clients with the higher risk profiles could find themselves excluded of the financial system.

"This is precisely what we, as an industry, need to assess," says Dr Hardoon. "Now that we are able to identify risk more specifically, could that result in potential exclusion rather than inclusion? If so, you cannot afford to apply AI to credit assessment blindly. So the use of AI puts us all in a situation where we need to evaluate what we are doing."

To prevent this, UOB formed a joint venture with a Chinese fintech, Pintec Technology, in April this year. The structure called Avatec uses a broader set of digitised data beyond that which is traditionally used in evaluating personal or business credit applications. This means that customers who previously didn't have any access to credit may have a better chance of seeing loans extended to them.

PREVENTING FRAUD

In addition, banks are hoping to extend AI to fraud prevention. OCBC, for instance, recently conducted a proof of concept (PoC) with Israel-based fintech ThetaRay. The firm uses AI and machine learning to help institutions boost their operational efficiency and accuracy in the detection of suspicious transactions.

According to early tests conducted by the bank, the technology developed by ThetaRay could help OCBC reduce the number of transactions reviewed by anti-money laundering compliance analysts by 35%, while the accuracy rate of identifying suspicious transactions could be increased by more than four times.

OCBC is now in an extended proof of concept and pre-implementation phase, which involves advanced testing with the use of additional data and which will allow the bank to further check the efficiency, security and robustness of the solution. If successful, the bank seeks to fully implement the ThetaRay technology – which will run in parallel with its existing transaction monitoring system – in Q2 2018.

With these changes in mind, the MAS want to make sure bank employees are fully ready to embrace AI.

> "Perhaps, what banks should do is make sure that when new employees are hired, they are given an AI business course as part of the rudimentary ethics and compliance training."
>
> **Dr David Hardoon, Monetary Authority of Singapore**

"We want to create a comprehensive ecosystem for AI," says Dr Hardoon. "And, an extremely important part of that ecosystem is training."

He goes on to say that the MAS is not at a stage yet where the regulator is asking banks to invest in training sessions for their employees. But, going forward, learning about the business implications of AI may well become mandatory in Singapore.

"I always try to avoid the term 'mandatory' because it sounds draconian," he says. "But, at the same time, if we give people the choice to learn more about AI, they may not seize the opportunity.

"Perhaps, what banks should do is make sure that when new employees are hired, they are given an AI business course as part of the rudimentary ethics and compliance training that everyone has to take when joining the firm. This would be the best way to really make AI prolific within the organisation."

Q&A WITH CHING CHING TAN, DEPUTY DIRECTOR, SANDBOX AT NGEE ANN POLYTECHNIC IN SINGAPORE

You're launching a new course entitled "AI in Finance". How did the course come to live?

For this course, Ngee Ann Polytechnic partnered with the Centre for Finance, Technology and Entrepreneurship (CFTE) in London.

We first met with CFTE in July 2017 at an event in Singapore. At the time, it became immediately clear to us that CFTE shared our passion for the finance industry. And we both recognised that AI would be coming in a very big way. These preliminary talks translated into a meeting in November 2017. Coincidently, this was also the time when the Monetary Authority of Singapore (MAS) announced its focus on AI and increased AI funding to boost this area.

Why did you decide to focus on AI ?

Very often, when we talk about AI in finance, we actually talk about augmented intelligence solutions to perform some specialised tasks such as synthesising information or recognising patterns. In that sense, AI can be very relevant to finance.

In addition, Accenture's future workforce survey reveals that two-thirds of bank workers expect AI to create opportunities in their job. But so far, only 26% of the workforce is ready to work with these technologies.

So we think the time is right for us to launch the AI in Finance

Ching Ching Tan, Ngee Ann Polytechnic

Course which will be relevant for every employee in the financial sector. That being said, the course is also open to other professionals including entrepreneurs, technology experts and consultants.

AI is evolving very fast. How will you keep the course relevant?

This is a course developed by the industry for the industry. There is a whole ecosystem in Singapore. Given the collaborative and close relationship we have built with the banking industry and the MAS, we have ongoing discussions with the key players about the latest developments in the industry. This, coupled with CFTE's extensive network in Europe, will allow us to keep abreast of the industry trends and update the course as we go along.

What's the take-up rate of the course so far ?

We are expecting 2,000 students to enroll. In Singapore, we have received good traction from banks such as OCBC and UOB who will be sending between several hundreds and a thousand staff members to the course. This is a clear indication that there is market demand for a course like this. **bt**

FINTECH FUNDING ROUND-UP

Fintech funding round-up

How money made the world of fintech go round in the last month.

UniCredit signed a strategic partnership with digital banking tech vendor **Meniga** and also took a minority stake in the company.

The banking group invested €3.1 million in Meniga through its UniCredit Equity Venture Opportunities (EVO) arm (set up in 2016). Just two months ago, Meniga received a €3 million equity investment from another customer, Swedbank.

UniCredit will integrate Meniga's white-label software globally, starting with Italy and Serbia.

Georg Ludviksson, CEO of Meniga, says the agreement is "the biggest personal finance management (PFM) deal in Europe to date".

Ant Financial has signed agreements with investors for its Series C equity financing totalling nearly $14 billion.

This round includes a tranche in renminbi raised by Ant Financial from domestic investors and a USD tranche raised by Ant International, an offshore subsidiary of the company, from international investors.

Funds raised will be used to accelerate Alipay's globalisation plans and invest in developing technology for inclusive financial services to unbanked and underbanked. The company will also be looking to expand in emerging markets through talent ready to tackle this digital transformation.

New investors have joined the USD tranche, such as GIC, Khazanah Nasional Berhad, Warburg Pincus, Canada Pension Plan Investment Board, Silver Lake, Temasek, General Atlantic, among others.

Low-code development platform **OutSystems** received $360 million in funding, bringing its valuation to "well over" $1 billion, according to the company.

The latest funds come from KKR and Goldman Sachs, which now have a minority stake in the US-based company. OutSystems' total funding now stands at $422 million. The company will use this investment to accelerate expansion and boost software automation R&D efforts.

OutSystems leverages artificial intelligence (AI), automation and third party integrations to help users build their own apps in a visual way, without the need to know or learn to code.

Founded in 2001, OutSystems has revenues of $100+ million and is growing that figure at more than 70% per year. The company's 700 employees serve thousands of customers in more than 50 countries, including Toyota, Logitech, Deloitte, Ricoh, Schneider Electric, and GM Financial.

Marqeta, an open-API platform for card issuing, has raised $45 million in new funding in a round led by Iconiq Capital, with participation from Goldman Sachs and existing investors, bringing Marqeta's total funding to $116 million.

Will Griffith, partner at Iconiq Capital, describes the paytech firm's offering as "the most advanced card issuing technology in the category" and the team as "extraordinary".

Marqeta will leverage the investment, along with the $25 million it took in from a strategic round in June 2017, led by Visa, to accelerate its domestic and international growth.

It already powers card programmes for well-known names like Instacart, Square, Affirm, Kabbage, and Alipay. "We're just getting started," states Marqeta founder and CEO Jason Gardner.

Regtech and reporting software firm **Cappitech** secured $4 million in its Series A financing round, led by 83North, with participation from Rony Grushka and Kevin Gould, co-founders of Markit.

Cappitech plans to use the funds to accelerate product development, expand regulatory reach and provide business intelligence and big data analytics.

The firm will also increase investment in its sales and marketing, to raise its profile across Europe.

Oval Money, an automated savings platform, kicked off its Series A round with a "significant" investment led by Italian bank Intesa Sanpaolo.

The bank will take a stake in Oval through Neva Finventures – the venture capital arm of Intesa Sanpaolo.

In turn, Oval's products will be offered to a network of over 20,000 tobacconists across Italy via Intesa Sanpaolo's Banca 5, "reaching a so-far-unserved demographic of immigrants and young people".

Enterprise Ireland unveiled a new €750,000 "competitive start fund" for fintech and deep tech start-ups.

The fund is designed to enable recipient companies working in areas including fintech, proptech, artificial intelligence (AI), machine learning, augmented and virtual reality, the internet of things (IoT), blockchain and cloud, to reach technical and commercial milestones.

Ireland's Minister of State for Financial Services, Michael D'Arcy says: "With Ireland being the fourth largest exporter of financial services in the world, developing and supporting the fintech sector is a national priority."

According to Enterprise Ireland's head of fintech, Enda McDonnell, its fintech companies generated €1 billion in revenue in 2016

Canada-based **Luge Capital** is looking for early-stage fintech companies and AI solutions applied to financial services with its $75 million round of financing.

The fund's major investors are Caisse de dépôt et placement du Québec (CDPQ) and Desjardins Group, Sun Life Financial, the Fonds de Solidarité FTQ and La Capitale.

The fund will support the development of solutions that "improve customer experiences, enhance efficiency for financial institutions and implement data-driven methods and AI for decision-making".

Luge Capital will concentrate on Seed and Series A financing, with initial investments between $250,000 and $2 million.

AlphaPoint, a New York-based fintech that leverages distributed ledger technology (DLT) to enable financial institutions to digitise, trade and manage any asset, is celebrating its fifth anniversary with raising $15 million in new funding.

The Series A round was led by Galaxy Digital Ventures, and brings the company's total capital to $16.6 million. AlphaPoint says it will use the funds to double the size of its team by year's end.

Life insurance company **Ethos** has launched with $11.5 million in financing led by Sequoia Capital, with the support of a range of different celebs.

The other participating investors include Stanford University; Arrive, a subsidiary of Roc Nation; Robert Downey Jr.'s Downey Ventures; Kevin Durant's Durant Company; Will Smith's Smith Family Circle; and a credit facility from Silicon Valley Bank.

Ethos claims that its solution allows most people to apply and qualify for a policy after a ten-minute application, versus the ten weeks it takes through a more traditional process.

Cologne-based **nextmarkets**, which specialises in curated investment, raised €6 million in capital in a Series A funding round.

The round featured participation from existing investors FinLab, Peter Thiel and Falk Strascheg, as well as new investors Axel Springer Media for Equity GmbH, Cryptology Asset Group PLC, and UK hedge fund manager Alan Howard.

The Series A takes the company's total equity to nearly $14 million. Howard commends the firm for its "impressive technology" which, he says, will add to the company's future innovations to make a "lasting impact on the retail investment space".

UK-based private equity house Dunedin invested in the £44 million funding of **Global Processing Services (GPS)** and took a "significant stake" in the business.

Dunedin calls the deal the UK's "third largest fintech financing in 2018". The firm says it sees "significant potential" for GPS to expand into new international markets as well as develop its product portfolio.

GPS provides issuer processing for 100+ clients including Starling Bank, Revolut, Pockit, Volt Bank, Loot, Stocard, Glint, Osper and Curve.

Agorai, a marketplace for AI tools, will invest £20 million in the UK AI market.

The multi-year investment will be distributed over the next five years. It will focus on three key areas: "education, empowerment, and entrepreneurship".

In terms of education, Agorai will provide grants and software licences to universities and research centres.

For "empowerment", the company explains that access to AI should not be restricted to large businesses alone. It wants to tap into the SME market by offering two-week workshops, free of charge, to approximately 150 companies per year.

When it comes to entrepreneurship, Agorai will launch an AI accelerator in London providing funds to entrepreneurs. Start-ups will get access to business people and AI experts, financial funding, and receive "allotments" of Agorai licences.

To make a profit from all this, firms can then develop and deploy their software solutions on the Agorai platform.

New York-based fintech **SmartAsset**, which provides automated financial solutions, has raised $28 million in new funding.

The Series C round takes the company's total equity capital to more than $51 million and featured the participation of Focus Financial Partners, Javeline Venture Partners, TTV Capital, IA Capital, and Citi Ventures, as well as other investors.

The company will use the investment to build its audience and expand its platform.

More than 45 million people use SmartAsset's personal finance information and online resources every month.

Open banking and insurance platform **NDGIT** raised €4 million in new funding in a Series A round led by Capnamic Ventures. It also featured participation from PROfounders and existing investors Dieter von Holtzbrinck Ventures and business angels. The funding takes NDGIT's total capital to $5.8 million.

The Germany-based fintech says the additional capital will be used to grow its team and further product development.

NDGIT stands for "Next Digital Banking".

San Francisco-based wealth management robo-advisor **SigFig** has raised $50 million in Series E funding.

The round was led by General Atlantic, a global growth equity firm, with participation from existing investors including Bain Capital Ventures, DCM Ventures, Eaton Vance, New York Life, Nyca Partners, UBS, and Union Square Ventures.

Swedish tech firm **Rebtel** has secured $8 million in funding to add digital banking services to its communication and on-demand work offerings for migrants.

Venture Capital funds Balderton Capital and Index Ventures are – together with other existing owners – responsible for the new injection of funding.

Rebtel has raised, in total combined with the existing funding, $16 million for its new banking endeavour. The new digital banking offering will come to market in Q4 of 2018.

Its goal will be to provide the nearly 50% of unbanked migrants around the world with an accessible option to build a financial life and history in the new country. **b**t

CASE STUDY: DBS

The edge

DBS is shaping up to be a fintech innovator when it comes to both external customer facing digitisation as well as using tech to provide operational efficiency. From being a relatively early adopter of AI chatbots within its mobile banking app it is now adapting to the era of open banking with an API platform.

This was launched in November 2017 and DBS says that it is the largest banking API platform offering in the world. This should set it in good stead in a market where customers increasingly demand easy access to related products and services via existing service providers.

Accordingly the bank has tried to create appropriate networks for its customers and to do so it has sought to collaborate with governments, partners, fintechs, start-ups and other members of the ecosystem.

Shee Tse Koon, group head of strategy and planning, and head of ecosystems, DBS, says: "We wanted to make banking simpler and more seamless for customers through the use of partner APIs. By creating ecosystem partnerships – collaborating, creating and innovating together with partners – we believe that we can provide the best products, solutions and experiences. This has the potential to significantly accelerate the bank's digital ambition and customer impact."

The platform currently holds 155 APIs with categories such as funds transfers, rewards, PayLah! (Singapore's most popular mobile wallet) and real-time payments. But as well as financial offerings there are also lifestyle and leisure offerings – building the total number of categories to 20.

Examples of this expansive nature include household names such as AIG, McDonald's, MSIG, PropertyGuru, as well as start-ups like Activpass, FoodPanda, Homage, and soCash.

The bank says it will increase the amount of APIs on the platform in

Source: Deyoadutrys, Wikimedia

response to demand. Currently, the most popular APIs are the ones that enable more convenient cashless payments as businesses look to simplify point-of-sale processes.

The presence of McDonalds, for example, shows how it can twin Paylah's cashless functionality on the platform with its round the clock delivery service

Another, PropertyGuru (an Asian online property group), offers customers an instant affordability assessment.

"Building our API platform has given us an edge – this allows us to operate with fintech-like agility and nimbleness, and also platform-like inclusiveness. This will be transformative in ways not imagined

Sebastian Paredes, DBS

"We believe the mutual exchange of knowledge and best practices with the fintech ecosystem will foster start-up success and help shape the future of finance."

Sebastian Paredes, DBS

previously, both for the customer and the bank," comments David Gledhill, DBS's group CIO.

ARTIFICIAL INTELLIGENCE

But the API platform is just the latest in the bank's fintech programme. It has been using artificial intelligence (AI) since 2016 when it was the first to roll out an AI chatbot. The technology behind this belongs to US-based Kasisto. This is a spin-off from SRI International, which created the technology behind Siri (Apple's voice assistant). The technology uses smart bots and virtual assistants with banking knowledge.

This meant that customers could bank conversationally from their preferred mobile messaging app – including Facebook Messenger. Using the chatbot customers manage their money across accounts, track expenses and even make payments in the process. There are plans to extend it to other mobile messaging apps like WhatsApp and WeChat in the next 12 months but as yet, no public stats of take up and usage.

ACCELERATOR PROGRAMME

To further progress the use of fintech the bank also has an accelerator programme, run from Hong Kong since 2015.

Since inception, the accelerator programme has worked with 30 start-ups and all have since secured funding support or expanded their business in Hong Kong.

DBS Bank (Hong Kong) CEO Sebastian Paredes comments: "The DBS Accelerator has helped spearhead our successful efforts to expand our collaboration with fintech start-ups and seek new horizons in digital innovation.

"We believe the mutual exchange of knowledge and best practices with the fintech ecosystem will foster start-up success and help shape the future of finance."

The six start-ups currently within the programme range from CUBE, an automated compliance engine, to Hyper Anna, an AI bot and DOV-E a mobile push notification service.

DOV-E plays into the push for usability at the front end. It delivers mobile push notifications and mobile payment solutions for point of sale (POS) and online and is embedded within a mobile banking app. The security is provided with one time only tokens rather than holding sensitive data on the mobile.

Basically, the customer waves his or her mobile device near to a retailer's POS, vending machine or e-commerce website for instant payment. This could work with the bank's API platform, allowing customers to engage with providers like McDonald's on the platform.

Another of the accelerator's participants, CUBE, feeds into the bank's own desire to use technology to make efficiencies within its own operations. Again, this is something that is playing heavily on the minds of most banks in a world where regulations are taking up an enormous amount of time and resource.

CUBE uses AI, machine learning (ML) and natural language processing (NLP) to manage regulatory compliance. In practice, the solution captures regulatory data automatically and on a continuous basis. It then creates a single source of cross-border regulatory intelligence. This is then >>

Shee Tse Koon, DBS

"We wanted to make banking simpler and more seamless for customers through the use of partner APIs."

Shee Tse Koon, DBS

"Building our API platform has given us an edge – this allows us to operate with fintech-like agility and nimbleness, and also platform-like inclusiveness. This will be transformative in ways not imagined previously, both for the customer and the bank."

David Gledhill, DBS

mapped onto a firm's policies, procedures, records and customer communications, to identify which regulations are relevant to specific jurisdictions and lines of business. It then provides alerts when regulatory change occurs and can help to flag up the impact of any changes on policy and procedure – the idea being that a bank can return to a compliant state as soon as possible.

And a third accelerator participant – Hyper Anna – is an AI robot that can be used especially effectively when it comes to writing code, analysing data, producing charts and, more importantly, insights – all things that come along with data analytics. It is voice enabled and works on a self-service basis as an overlay to proprietary data. It is intended to be especially useful operationally to identify customer interactions, finance, compliance, supplier activities to power high-impact use cases. This could include cross-sells/up-sells, expense management, and revenue forecasting, supply chain management, amongst others.

INTERNAL OPERATIONAL EFFICIENCY

Investing time in start-ups like these backs up the bank's own initiatives when it comes to operating efficiently and making the best use of data analytics capabilities to inform process.

Gledhill comments: "We've been working hard not just to improve our front end technology but also to run a more efficient technology architecture and infrastructure, resulting in massive cost savings for the bank."

To this end, the bank has been working to scale an enterprise-wide centre of excellence (COE) in robotic process automation (RPA), since November 2017. This was the first of its kind within the banking industry in the region and the idea was that by making better use of time and resources, that the bank could save operating expenses, up employee productivity, reduce error rates, and quicken speed-to-market.

Indeed, according to research conducted by analyst firm Forrester, by 2019, process automation will change up to an estimated 25% of the work associated with all job categories


David Gledhill, DBS

The robots use a style of automation where a software programme can help to manage and execute a range of repetitive, rules-based tasks that require handling high volumes of structured data. These robots also have the capacity to operate 24x7, allowing organisations to remain operational outside of standard working hours.

DBS says that the HR function is one area to have particularly benefitted from data analytics to help increase revenue, reduce cost and risk. The bank says that areas to have benefitted include employee retention. It has 36 data scientists working across different teams in the bank, and within the HR's human capital analytics (HCA) team there are four.

Another attempt at efficiency includes moving the bank onto a cloud-optimised centre via collaboration with Equinix. The new centre will be 75% cheaper to run and a quarter of the size of its existing data centre and result in a sevenfold increase in storage and computing capacity since 2014.

Gledhill says: "Growing business volumes and digitalisation, computing workloads at the bank have doubled in the last three years and are expected to see continued significant growth.

"The Equinix project will further fortify our cloud infrastructure and improve our ability to be even more agile and scalable. It will also contribute towards advancing our sustainability agenda by improving energy efficiency by at least ten times."

The bank's drive towards cloud technology for its applications underlines its commitment to digitally transform the bank from client facing functions all the way to back-end processes. **bt**

Alison Ebbage

The art of selling to a bank

Start-ups, there is no right way of selling to a bank, but there is a wrong way. *Leda Glyptis* provides the lowdown.

Fintech is officially cool these days and banks have gone from indifference, to various degrees of engagement (via incomprehension and PR frenzy) to eventually totally drinking the Kool-Aid. Which is awesome for the banks but I am not of the school that thinks this will make life easier for the start-ups. And this is not necessarily a bad thing.

When I started my career, if you were in the start-up, assuming you had a product that fulfilled a need, getting the meeting with the bank wasn't as hard as getting on the preferred vendor list. The conversation was commercial and practical, although rarely easy.

When I crossed over to the corporate side a few years later, the mechanics of the conversation were still purely commercial and needs driven. Fintech firms of all sizes peddled solutions. We didn't call them fintechs then but they were small firms selling financial technology often leveraging tech we had never used in the bank before, so the shoe fits. But the conversation remained always fully commercial. That was a shape we understood, on both sides.

Enter left the emergent tech wave, a fascination with start-ups and the realisation that digital transformation is not an opt-in now, and the conversation changed.

Bankers had to listen to things they did not yet have a problem for. Bankers needed to understand and leave their comfort zone and experiment.

It is easy to pick out where we get this wrong, hesitate too long or try to hold onto comforts of old. It is important that we shine a light at everything we as an industry could be doing better and I, for one, don't shy away from it.

But.

It's not all on us.

As the fintech ecosystem grows year on year, with thousands of copycat businesses and full time influencers flooding your T witter feed and your conference calendar, life is perversely getting a little easier for bankers. Now we have choice. Now we are buyers in a competitive market. It's not all doom and gloom and the "other side", whoever that is, no longer holds all the aces, assuming they ever did.

And yet I see so many entrepreneurs coming to meetings with banks behaving like they are doing us a favour, addressing senior decision makers in the style of "this is your assassin, I am here to kill your business, but first let's do a pilot". So let me take a break from shining a light onto what we as an industry can do better to say that as a customer, I have seen start-ups get their commercial encounters with banks terribly wrong. I am all for shaking things up and I admit there is no right way of going about these things. But, if you want to sell to banks, this is how not to do it.

TRENDS AND BUZZWORDS: THE TECH BEING HERE TO STAY DOESN'T MEAN YOU ARE

Part of this is on us, the bankers. We have relied heavily on start-ups over the years to educate us on smart contracts and interesting use cases for behavioural economics and new inputs for risk assessments. So start-ups often came to meetings with a teacher hat on. This is the trend and I am part of it and since you trust me to explain, maybe you also trust me to do.

That was a very good tactic five years ago. Today, using the global trend to justify the firm just doesn't work. "We did an ICO" has been included in over one third of decks I received from start-ups of various sizes this year so far. "We also have a blockchain flavour" appeared in just under half. Yes I counted.

> "As the fintech ecosystem grows year on year, with thousands of copycat businesses and full time influencers flooding your Twitter feed and your conference calendar, life is perversely getting a little easier for bankers."
>
> **Leda Glyptis**

Buzzwords don't work that way any more.

We have learned a lot and understand better, so leave the trends and buzzwords out of it unless they are part of what you are trying to sell. And be aware that with 13,000 companies describing themselves as fintech out there, your task in the meeting is not to explain that the space is real and won't go away. It is to explain why among the crowd, yours is the proposition that will survive the market correction, when it comes. That this trend is here to stay and so are you.

The shoe is on the other foot, when it comes to survival statistics so best not frame your meeting in terms of the bank's viability. People in glass houses and all that.

BACK TO BASICS: WHAT ARE YOU FOR?

I really enjoy going around the exhibition floor at industry events and meeting new companies. But I see a worrying pattern emerging of people who can't articulate what they do for a living, beyond a high level vague buzzword-heavy description. Now it could be that they send the wrong folks to these events but I would hazard

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> **Leda Glyptis**

SPOTLIGHT: START-UP LIFE

that in a small company, the folks who can't describe your overriding purpose are not just wrong to man your stall. They are bad for your business.

And it's not just events. I get sent decks and approached by start-ups all the time and I often finish reading a document and am none the wiser as to what you actually do, what you are trying to sell me. The decks are pretty, the references great, the graphs awesome. I sort of want it, but what is it?

PREPARE FOR THE MEETING

On one occasion I interrupted a sales guy mid-flow. 20 minutes into a pitch call, I had no idea what his firm did. I understood the value they delivered to their client. The numbers were clear. I just couldn't work out how they did it. So I asked. He said he was not prepared for this question, could we organise a follow-up call.

True story.

Now call me old fashioned but to me that's the sort of question you don't need to prepare for. But if you do, then do.

I shouldn't have to say this, but seriously: prepare for the meeting.

Think what you want out of it, think why your audience may have agreed to come to the meeting in the first place, what they may want from you, what they may ask. Prepare. Be clear what you want to sell. Be clear what they may want. Because you may not be ready to give it.

If you are not ready, don't take the meeting. Bank the opportunity until you can use it. Don't burn your bridges, you may need them.

I remember meeting with this company once for a working session on how we could integrate their offering into our App Store structure. Great meeting with razor sharp focus on client value generation. Only, half way through the meeting, they admitted they didn't have an API yet and it wasn't on their roadmap that year. Their data would be delivered in a good ole spreadsheet, emailed directly to your inbox. I was furious, my CTO shrugged and minded less. We never saw them again.

If you are not ready, don't take the meeting.

MIND YOUR MANNERS: IF YOU WANT THE HAND TO FEED YOU, DON'T BITE IT

You go to a big bank to pitch or brainstorm or workshop.

You are in their house.

You don't need to swap your jeans for suits or remove the stickers from your MacBook. But you do need to mind your manners. If you are an antiestablishment anti-capitalist, power to you and all, but you are in the wrong job.

Don't sneer and don't demean. Bankers are a lot of things but we are not stupid. Coming in to call our business moribund, our systems obsolete and our skill-sets irrelevant is both inaccurate and monumentally stupid.

If we are so useless, why try to partner with us.

If you want us to sign a cheque at the end of the session, you may want to tone down the arrogance. Especially if your amazing and snazzy solution is a bit of UX sitting on top of my infrastructure. This actually happened. Schadenfreude is sweeeeet.

MIND YOUR ZEROES: THE ART OF PRICING

When I was in a start-up myself, after building a product and road-testing it with potential users we had to work out how to price it. How to price a pilot, how to price a licence, how to price any bespoke deployment.

Where do you even begin? We were 25 years old and had no idea what grown-ups actually pay for things like that. How do you fix that knowledge gap? Finger in the air… a gauge on what the bank can afford… a number that matches your outgoings…

Wanna hear a crazy idea?

Get advice.

We, all those years ago, asked for advice on pricing models and actual price point. We spoke to tech firms, we spoke to regulatory bods, we spoke to bankers. We went to people who sell and buy software for a living and got their personal but professionally informed opinions. We did it until a pattern began to emerge then we tested it with clients. We refined. We adjusted.

We accepted that pricing is part of the product. We realised that we needed to get it right to avoid looking like clowns. Or worse, looking like opportunists trying to take the client for a ride.

We learned that it's OK to charge for pilots, unless you need to prove something as much as the client needs to learn it. We learned that if you are still testing your own assumptions you can't make the customer pay for your RnD. We learned that the pilot needs to be priced at a level commensurate to the cost of the full product (hint: a pilot cannot entail licence, hosting and support fees. And yes that's also a true story). I know you are desperate for cash flow but this is not how you do it.

We also learned, the very very hard way, that some times paid pilots are not good money. They are not sticky money. They won't convert, they won't take you where you need to go. Sometimes a free pilot is a better move towards repeatable revenue than a long string of paid up pilots that will never go anywhere. They will pay today's bills, but they won't scale so neither will you.

By all means don't work for free, don't let potential customers waste your time with exercises they never intend to implement. But don't waste their time either.

The fintech era is here.

Emergent tech has emerged, regulatory barriers to entry are lowered, the banking value chains are unravelling and customers are hungry for change.

Yes bankers are uncomfortable.

But in this changing and unsettled environment, fintech providers abound. There are options galore. So if you are a budding entrepreneur dreaming of the big times, you are right in thinking there is no one way to success. You are right in trying to do it your way. There is no right way. But there is a wrong way: if you choose to make banks your clients, treat them with the same respect you keep encouraging us to show to our customers. It's called eating your own dog food, and banks are getting very good at this. And we expect the same from the challengers.

In fact, we expect more. You are the guys who started this chain reaction, who got us thinking, who raised the bar. We expect you to keep doing that. In the tech you produce, in the ways you think and, yes, in the way you treat us as your customers. You taught us to believe it is all interconnected.

Don't let us down. **bt**

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> Leda Glyptis

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>
> Leda Glyptis

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

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

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

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

Movers and shakers

UK challenger bank **CivilisedBank** has appointed **Michele Turmore** as COO. She moves from Harrods Bank (now merged into Tandem).

She also previously worked at Lloyds Banking Group in various roles and was COO of ARLO Associates, an asset management and insurance business in the UAE.

Finastra has promoted **Simon Paris** to CEO from deputy CEO. He is taking over from Nadeem Syed "as a part of a planned succession process", the vendor says.

Robert Smith, founder, chairman and CEO of Vista Equity Partners, which owns Finastra, says Paris "will take Finastra to the next level as a true platform company [from a solution company]".

Paris joined the company (Misys at the time) in mid-2015 from SAP and was instrumental in the shift to a cloud-based model for all Finastra solutions.

Matteo Rizzi, who co-founded Swift's Innotribe, has joined **NEVA Finventures** as venture partner and strategic advisor. NEVA Finventures is the corporate venture capital arm of Italian banking group Intesa Sanpaolo.

Algomi, the network company providing information-matching solutions for the optimisation of fixed income liquidity, has appointed former MarketAxess EMEA COO, **Scott Eaton**, as CEO.

Eaton was also global head of emerging markets trading at UniCredit and held a variety of senior roles at ABN Amro, RBS, Deutsche Bank and UBS.

wefox Group has added **Spiros Margaris**, a venture capitalist and advisor, to its advisory board.

"I have looked at the wefox Group insurtech business model from every angle and I believe they have the highest potential to disrupt global insurance industry," Margaris states.

"Not only am I truly impressed by their execution in providing a win-win customer solution, but their approach is incredibly scalable, which makes the future for wefox Group unlimited."

Saxo Bank has named **Oliver Zecevic** as its new head of operations. Zecevic will start his tenure in September. He is currently on gardening leave following a lengthy career at Nordea. He joined Nordea in 2002 as business analyst and left in January 2018 as head of investor solutions and services.

CIMB has appointed **Hendra Lembong** as chief fintech officer. Hendra is replacing Olivier Crespin who was hired last year to head the new unit, CIMB Fintech.

Crespin was working on building digital-only banks in the region for CIMB, including in Vietnam and the Philippines, similar to DBS's Digibank in India and Indonesia, which he led previously.

It is unclear whether Lembong will continue with this initiative. He moves from the role of CEO, group transaction banking, at CIMB.

UK fintech start-up **MarketInvoice** has appointed **Rija Javed** as CTO, as it "looks to invest heavily into its technology". Javed joins from Wealthfront, a Silicon Valley based start-up, where she spent four years.

Within her first few months at Wealthfront, she built the wealthtech's first mobile app. She then led its biggest initiative to build a new brokerage and banking platform.

She becomes one of the first female CTOs at a UK fintech.

Anthony Browne, former CEO of the British Bankers' Association (now UK Finance) and entrepreneur in residence at Barclays Techstars, has joined the board of another UK fintech start-up, **Coconut**.

Coconut provides mobile banking services to the UK's freelance and self-employed community. Browne says he became an early Coconut customer and "was impressed by how the product helps its customers solve their painful tax and accounting problems". **bt**

EVENTS CALENDAR

September

11-12 Group Treasurers' Exchange, London
grouptreasurerexchange.iqpc.co.uk

13-14: Token Fest, Boston
www.tokenfest.io

20: 2nd UK Robo Advice and Digital Wealth Summit, London
www.cityandfinancialconferences.com

24-26: RiskMinds Americas, Boston
finance.knect365.com/riskmindsamericas

October

3: MoneyLIVE: Lending, London
new.marketforce.eu.com/money-live

4: RegTech Summit for Capital Markets, London
datamanagementreview.com

15-16: European Women Payments Network Conference, Amsterdam
ewpnamsterdam2018.eu

20-25: Sibos, Sydney
www.sibos.com

22-23: InsurTech Rising Asia, Hong Kong
finance.knect365.com/insurtech-rising-asia

22-24: SAP Conference for Treasury Management, Chicago
www.tacevents.com

November

19-20: LendIt Europe, London
www.lendit.com

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Out of office

Fintech rock band storms the charts

Are you ready Bognor Regis? Can you hear me Tunbridge Wells? A fintech rock band has emerged from the shadows and is bringing its special kind of noise pollution to the UK.

In dreary community centres located in dull provincial towns, the band – called Alfred and the Glitchbots – is now touring and promoting its new album "Raw PowerPoint".

Those hoping for the muscular and mesmerising rhythms of say Iggy Pop, Joy Division or Black Sabbath are going to be in for a surprise. Or – like a journalist checking their bank balance – in for a massive disappointment. The only chart this fintech band will be storming is a pie chart.

Fists are not pumping and heads are not banging as the musical style of Alfred and the Glitchbots can best be described as a lifeless combination of Sting and Mike & the Mechanics. It's commercialism first, music a distant second.

> "If a neighbour played this CD I would break into their house and destroy their sound system."
>
> **Vince Vanceville, The Shawbank Redemption**

Like a pack of ready salted crisps being eaten lethargically by a person wearing a Marks & Spencer's cardigan, the music emits boredom and banality. There'll be no humming to these tunes. Just ho hums.

Vince Vanceville, reporter at the online news site The Shawbank Redemption, summed up the mood after receiving an advance copy of the album: "If a neighbour played this CD I would break into their house and destroy their sound system. That's how bad it is. I wouldn't care how long I was jailed for, because at least I would be free from hearing this music again."

Sadly, the band members haven't adopted the mask-wearing stance of American heavy metal outfit Slipknot. Like many in the fintech world, a touch of anonymity or mystery is an elusive concept.

Instead, in a painful press release the "leading" and "significant" band is revealed to be the colourless creation of a CTO, COO, a "digital evangelist" and a "marketing guru". The latter writes the band's lyrics. Next time try instrumentals.

Naturally, and unsurprisingly, the four group members trotted out the usual clichés about bringing "innovation" to the music scene and being a "game changer". I don't know about you, but I get an appetite for destruction when I see those words.

If you're wondering what some of the songs on the album are called, then prepare to be underwhelmed.

It opens with the forgettable "Dirty ICOs Done Dirt Cheap" and rapidly goes downhill. Other tracks include "Born to be Mild", "Let's Get This Jargon Party Started", "The Boys Are Back in Town, Because Not Enough Women Were Invited to the Fintech Panel", and "If Loving You is Wrong, It Sure as Hell Won't be Mentioned in the Press Release".

The album is not quite destined for greatness… merely headed to the next bargain bin at a dusty and forgotten HMV store.

When most bands tour, the crowd call for an encore. When Alfred and the Glitchbots play, the audience will be calling for their heads on a plate. **bt**

Antony Peyton