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Editor's note

Digital disruption hits you in waves. So far, we've got hit by three of those, according to Bragi Fjalldal, CMO and VP business of Meniga, speaking at the recent FIN42 conference organised by the fintech firm in its home country of Iceland.

The first wave, pre-2006, is small – it is just the beginning. "Look at all those cute, little fintechs," say the incumbent industry players. They set up "nurseries" for them in the form of incubators and accelerators, innovation labs and hubs.

The second wave, 2006-2014, is bigger – "whoa, there is a lot of them and some are huge!" exclaim the incumbents. Fjalldal highlighted the likes of Klarna, Adyen and Stripe. The market is taking notice.

And now we are in the third wave, where all these fintechs "are not so cute anymore" but are upsetting the balance of existing powers of the financial services market. New entrants are making a real impact, Fjalldal emphasised. 63% of banking and payments institutions in the UK are post-2005 creations. Together, they capture 14% of total banking revenues in the country. There are over 40 institutions in the UK that fall into the "challengers" category, and the UK regulator is kept busy with a steady stream of applications for banking licences.

On the global scale, Alibaba's Ant Financial empire is valued at $150 billion, which is more than Goldman Sachs and BBVA combined, Fjalldal noted. Alipay has 870 million mobile pay users (30% of whom are outside China), MYbank serves over 3.5 million SMEs, wealth manager Ant Fortune has over 180 million users, while Ant Check Later has over 100 million consumer credit clients. And all these numbers are for active users.

In his keynote speech at the FIN42 event, Chris Skinner, a well-known commentator and strategist on the financial markets, cited a conversation he had with Li Wang, head of Alipay and Ant Financial in EMEA, and Ashok Vaswani, CEO of Barclays Bank UK. Each employee of Alibaba generates $16 million a year, Wang said. What about Barclays? An employee of Barclays generates less than $400,000, Vaswani replied.

Look east, Skinner and Fjalldal urged.

The fourth wave is on the way. **bt**

Tanya Andreasyan
Editor-in-Chief
Banking Technology

NEWS

Lloyds to up digital game with Thought Machine

Lloyds Banking Group has partnered with and invested in Thought Machine, a UK-based banking tech company, to accelerate the digital transformation of the bank's business.

Lloyds's £11 million investment represents a 10% stake, part of its Series A £18 million round. The fintech has developed Vault, its cloud-native core banking technology.

Zak Mian, group director, transformation at the bank, says: "A key part of our recently launched three-year strategic plan is applying technology innovation to meet our customers' evolving needs."

The new technology aims to provide customers with more tailored products, enable faster development cycles and further digital banking. Lloyds will enter into a development and deployment phase in 2019.

Lloyds says it is still looking to make further investments to accelerate the delivery of its digital banking programme. It also involves some major job changes – the group plans to axe 6,000 jobs (mainly in the retail and corporate banking divisions) and create 8,000 new roles focused on digital services.

Meanwhile, Thought Machine was in litigation with consultancy firm Capco for some time. Capco claimed that Andrew Tarver stole tech and IP developed by Capco/Bold Rocket – where Tarver worked. This would eventually be Thought Machine's tech, according to Capco. The consultancy firm was asking for £145 million.

Earlier this year, Thought Machine went through a re-organisation process: Thought Machine Ltd and Being Technologies both became Thought Machine Group.

Though Tarver was never on Thought Machine's payroll, he has been associated with Being Technologies.

It is understood the two firms have now come to an agreement and there is no longer a court case.

The re-organisation and the quiet settlement might have been aimed towards erasing Tarver's relationship with Thought Machine in the public eye.

Henry Vilar

BIAN unveils free digital API Exchange

Banking Industry Architecture Network (BIAN), an independent non-profit standards association, has launched its API Exchange, an online digital library containing over 65 standardised API definitions.

Banks, software vendors and fintechs can access definitions from the API Exchange for free, once registered online.

"The definitions help to reduce the complexity of building and delivering open banking capabilities for banks, providing clear guidance on how to implement, innovative and intuitive digital services across both back-end and customer facing functions," BIAN explains.

"This will allow banks to react to the limitations with modernising legacy technology and changing customer expectations more quickly, and with less cost."

The organisation says that "archaic and convoluted banking IT architecture is a major barrier for banks, making it difficult to categorise disparate core IT systems into clear business functions". So BIAN aims to help by "aligning with a framework that is standardised across the whole international banking industry".

This will enable incumbents to collaborate with challenger banks, technology experts and fintechs with IT systems and APIs that are in-sync.

The API Exchange has been created by over 35 developers from across the BIAN member network of banks and technology vendors, including Citi, PNC Bank, JP Morgan Chase, IBM, Virtusa, EY, Swift, Accenture and Wipro.

The current API library will support banks with building modern processes around customer offers and on boarding, payments, loans, and mobile access, with additional API definitions to be added in the coming months.

All APIs have been created using BIAN established data models and in accordance with the ISO 20022 global standardisation approach.

The API Exchange is currently hosted on Microsoft's Azure cloud.

Hans Tesselaar, executive director of BIAN, says the initiative is "the beginning of a new era in software development for the financial services industry".

Tanya Andreasyan

Yoyo Wallet lands $30m deal with Hard Yaka

UK payment and loyalty app Yoyo Wallet has signed a $30 million deal with Greg Kidd's investment firm Hard Yaka. Well-known in the fintech industry, Kidd was an early investor in Ripple, Square, Twitter, and Coinbase.

For its end of the deal, Yoyo will integrate its commerce API with Hard Yaka's Global ID, a global user identification platform. Global ID helps users prove their identity via their electronic footprint. The tool's identity token is a key feature to helping users make purchases online and in-store; this commerce element is where Global ID will leverage Yoyo's loyalty and purchasing app.

"Yoyo is the cornerstone to the global delivery of the Hard Yaka vision. We know about data – and our collaboration together will generate a boost to the Global ID movement that will shape the future of the global consumer market and disrupt the status quo," states Yoyo chairman Alain Falys.

In praise of Yoyo's secure and scalable platform, Kidd says: "Yoyo has a very sophisticated technology that includes a nimble application programming interface that makes it easy to integrate into the Yoyo platform. This will enable users to pay for goods and services and receive loyalty rewards and other benefits through a mobile device – without compromising the security of the consumer or giving up more private details than necessary."

Yoyo was founded in 2013 and claims over one million users. Yoyo has raised $30.3 million to date from Metro Group, Touchstone Innovations, Woodford, and Firestarter.

Julie Muhn, Finovate

Emirates NBD debuts API sandbox

Emirates NBD is now open to open banking with the launch of its API sandbox.

It says it's the first UAE bank to introduce such a platform in the region, as part of its AED 1 billion ($272.3 million) investment it has committed to its digital revamp.

Abdulla Qassem, group chief operating officer at Emirates NBD, says the sandbox will be a "game-changer".

The sandbox is powered by Virtusa. It consists of over 200 APIs and 900 end points covering retail, corporate and SMEs.

Developers also have access to over three million simulated customer transactions based on the BIAN (Banking Industry Architecture Network) model.

According to the bank, the sandbox makes Emirates NBD more accessible to developers with API technology boosting the bank's role in accelerating the region's innovation ecosystem as well as creating increased for value for its customers and partners.

So far, four unnamed fintechs have been onboarded to the sandbox to create proof of concepts.

Antony Peyton

Fidor splitting from France's BPCE

Germany-based bank Fidor seems to be looking to divorce from French banking group BPCE, according to a blog by Chris Skinner, a well-known fintech commentator.

Fidor was originally acquired in summer 2016, and it seems BPCE never managed to integrate Fidor's digital approach fully.

The German bank is famous for its digital offerings, such as a better interest rate based upon Facebook likes, and storing World of Warcraft gold or cryptocurrencies.

However, BPCE's chief digital officer, Yves Tyrode, who joined the bank in October 2016 from a non-banking background and have inherited the deal, struggled to sell the idea to the provincial bankers (bearing in mind that BPCE is formed of many small regional banks).

Francois Perol, group CEO of BPCE, said that, following the acquisition, Fidor was to be set up in France first. To date, Fidor's activities in France are non-existent, Skinner points out.

According to Fidor's founder, Matthias Kroener: "I think we had two good years. To now fully enable a maximum value creation out of Fidor's potential I think it is a respectable resolution to go for a modified shareholder set up."

The German-French clash of cultures, and the issues between a new fintech start-up and an old, risk-averse bank, seem to have also contributed to the fallout, according to Skinner.

On top of this, French media reported that there was a romantic affair taking place between two C-level members who took part in the signing of the deal, which gave way for political in-fighting. The leak to the media just made the mess even bigger.

That being said, the consumer banking business has increased threefold and business banking fourfold over the past two years. The balance sheet has been totally cleaned up for Fidor, thanks to the support of Paris, making a balance sheet of around €1.5 billion.

With the support of Clipperton and Messier Marais, Fidor and BPCE are reportedly now preparing for their separation. Ernst & Young is doing the due diligence and spring of next year should see the complete split between the two firms.

Henry Vilar

UBS in wealthtech revamp with Broadridge

Broadridge Financial Solutions and UBS have unveiled an "innovative strategic partnership", where UBS's wealth management arm in the US will become "the anchor client" on Broadridge's new wealth management platform.

The recently launched Broadridge Wealth Platform is touted by the vendor as "a next-generation open platform". It will provide UBS Wealth Management USA with "an integrated and modern front-to-back office solution that optimises financial advisor productivity, creates a richer client experience, and digitises enterprise-wide operations", Broadridge states.

Tim Gokey, president and COO of Broadridge, describes the project with UBS as "a major milestone in creating the wealth management industry platform of the future". The new solution, he believes, "will create a new industry business model by enhancing the advisor and client experience while mutualising key front-, middle- and back-office functions".

Tom Naratil, co-president of UBS Global Wealth Management and president of UBS Americas, claims that Broadridge is "the only fintech leader with the proven technology, scale and experience to deliver such a transformational solution".

According to Broadridge, its new platform will include a modernised advisor desktop and customisable tool set. Key advisory features will include performance reporting, managed accounts support, and sleeve accounting; multi-market order management and trade routing, and full back-office functionality that handles multi-currency, global clearance and settlement, asset servicing, and integrated workflow across the entire enterprise.

The vendor emphasises its offering "will be fully open with a comprehensive, real-time data fabric and API structure that enables seamless connectivity to UBS's proprietary and third-party applications".

Tanya Andreasyan

NEWS

Grab gets $50m funding from Kasikornbank

Singapore-based Grab has got $50 million from Thailand's Kasikornbank as they unveil GrabPay by KBank, a co-branded mobile wallet.

With this partnership, Grab says its wallet is now in all ASEAN-6 countries – Singapore, Malaysia, Indonesia, Vietnam, Philippines, and Thailand.

Reuben Lai, senior MD, Grab Financial, says the partnership makes it the "first mobile payments platform to launch e-money-licensed payments services across ASEAN-6 and underlines the strength of our partnership-based strategy".

The investment is part of Grab's ongoing fundraising round, which includes Toyota, Microsoft, Booking Holdings, Hyundai, and Oppenheimer Funds.

Grab explains that the investment is a first for KBank in an international company with a core business outside of Thailand.

According to the Bank of Thailand, 68% of all transactions in Thailand are carried out in cash. The pair are naturally keen to promote cashless transactions.

First, the GrabPay by KBank mobile wallet in the Grab app is targeted to launch in early 2019. This will allow Grab customers to pay for transport and delivery services, transfer funds to friends and family, purchase products and services online, and make QR-code payments in restaurants and shops across Thailand.

Via PromptPay, Thailand's national e-payments scheme, all QR-enabled merchants in Thailand will be able to accept GrabPay by KBank upon activation.

Second, beyond the wallet, features from KBank's K PLUS app and the Grab app will be integrated across both apps starting in 2019.

Finally, KBank and Grab want to jointly offer products to their customer base, such as loans.

Antony Peyton

NAB to migrate 35% of IT portfolio to cloud

NAB is aiming to migrate 35% of its IT application portfolio to the cloud within the next three to five years, according to the bank's latest full year results.

This comes following a year in which the bank has touted a digital banking revamp that would take it to around 6,000 jobs. However, 2,000 new jobs would be created to maintain and develop the new digital tech implementations.

In the report, the bank also shows a cash profit drop of 14.2% to $5.7 billion – this is mostly due to the bank giving money back to customers in the wake of the Royal Commission and the aforementioned job cuts.

NAB is also hoping to shut down 15-20% of its IT applications.

So far, the bank has managed to put 70 production applications into the cloud, around 3% (58 applications) were transitioned during 2018, "including 30 in the last 50 days". It seems the bank is really moving to a higher gear recently.

In addition, 5% of all IT applications, or 120 in total, have been culled. It is estimated the bank has around 2,400 IT applications in its portfolio.

It is AWS and Microsoft Azure who are now competing to carry the burden of NAB's apps on their clouds.

Henry Vilar

US community banks forge Alloy Labs Alliance

A group of 12 US community and regional banks have founded Alloy Labs Alliance, a consortium approach to innovation and technology adoption.

Fintech Forge will manage the alliance, and Crowe LLP, a public accounting, consulting and technology firm, will provide advice and services regarding regulatory and compliance matters.

"No bank wants to be the next Sears. To survive, every bank needs to innovate in order to drive down operating costs while ramping up the value we can deliver to the customer," says Chris Nichols, chief strategy officer of CenterState Bank in Florida.

"Community banks play a special role in the lives of our customers," adds Julie Thurlow, CEO of Massachusetts-based Reading Cooperative Bank, "but we don't have the same IT and innovation budgets as the big banks to capitalise on that relationship."

According to the gang, Alloy Labs is a platform for banks to identify shared areas of opportunity, and establish smaller workgroups to share best practices through implementation.

Working collaboratively, the banks aim to work with fintech start-ups to shape their solutions. Alloy Labs says it is currently working on both customer facing applications and back office efficiencies. No specifics on that at present.

In a nod to the slow brigade, Alloy Labs says banks that aren't ready to begin adopting new technology can still join the alliance to learn from others in the group, share in ongoing research, and shape the direction of the consortium.

Founding members span the US, representing institutions ranging from $251 million to nearly $20 billion in assets.

Along with the two above, founders include Citizens & Northern Bank – Pennsylvania, Citizens Bank of Edmond – Oklahoma, Columbia Bank – Washington, First National Bank of Omaha – Nebraska, Gulf Coast Bank & Trust Company – Louisiana, Inland Bank – Illinois, Lincoln Savings Bank – Iowa, Mercantile Bank of Michigan, nbkc Bank – Missouri, and QCR Holdings – Illinois.

Antony Peyton

11:FS Foundry's launch brings digital to banks

Consultancy firm 11:FS has launched 11:FS Foundry, an approach to delivering digital banking services through a modular core banking architecture. It kicks off the partnership with DNB, Norway's financial services group, which has also become an investment partner.

DNB has invested £3 million for a 5% stake in 11:FS Foundry. This investment represents the long-term commitment between 11:FS and DNB to change how banks deliver digital banking services, the two companies say.

"The first task for this partnership will be to see if we can optimise the value chain for unsecured credit at DNB," says Rasmus Figenschou, group executive vice-president for new business at the bank.

"Norway is a global leader in the use of digital services across the board and is the ideal location for designing, building and delivering the next generation of banking services," adds David Brear, CEO of 11:FS.

11:FS Foundry aims to bring digital, personalised services and experiences to market far faster than traditional methods and at significantly less cost.

It uses cloud-based technology and a modular approach, allowing customers to deploy an entire banking stack, or select services, depending on their strategy.

It also claims to improve service development efficiency and deliver a lower total cost of ownership for digital services. It also claims to offer a higher level of IT security, based on a "zero-trust security" model, built to be encrypted and GDPR compliant.

Banks that have already invested in banking systems, or cannot easily build on their underlying infrastructure can also use 11:FS Foundry to launch new digital offerings in a gradual and modular way, the consultancy firm adds.

Henry Vilar

Central 1 and Backbase Forge new digital banking platform

Central 1, a digital banking and payments provider for credit unions and financial institutions in Canada, has launched Forge for its clients – a new digital banking platform.

Forge is built on the Backbase technology (the two firms partnered for this project at the start of last year) and "puts the control in the hands of clients, providing the flexibility and control to design their digital branch of the future with a user experience that is unparalleled today".

Mark Blucher, Central 1 president and CEO, states: "We promised our clients something exceptional and in nine short months we have delivered a platform that will enable our clients to create personalised, customised banking experiences for their consumers."

Alterna Bank (a subsidiary of Alterna Savings and Credit Union) and FirstOntario Credit Union are the first financial institutions in Canada to use Forge.

Central 1 says that Forge will be "the foundational platform of its digital services going forward".

Full client implementation of Forge is slated to take place over three years with the objective to have clients fully transitioned by 2021.

Central 1 provides services to around 300 financial institutions. Its customers operate across 870+ branches, serving 3.3 million members across the country and holding more than $112 billion in assets.

In addition, Central 1 is the primary liquidity manager, payments provider and trade association for its 42 member credit unions in British Columbia and 70 Ontario member credit unions.

Tanya Andreasyan

London-based bank Dozens about to launch

Dozens, the London-based challenger bank previously under the name of Project Imagine, has already opened up its waitlist for its first batches of customers in preparation for its launch.

Dozens defines itself as a "second generation digital bank", and aims to be a wealth management alternative from the get-go.

On its site, it claims to provide an "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.

"We're changing the fundamental model of banking. Our income as a business is directly linked to the returns we create for you. We keep a smaller share and pass on the majority to you. Unlike most banks, we are not looking to make money from things like overdrafts, but by helping you save, invest and grow your money," the updated website reads.

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

"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)," according to Chakravarty. "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."

The site says it offers a bond with 5% p.a. interest on savings.

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.

Henry Vilar

Cyprus to unleash blockchain and fintech development

VeChain Foundation, a Singapore-registered legal entity with a focus on building public blockchain solutions, and Cream a US-registered company with a focus on blockchain project strategic advisory and investments, will establish a partnership in Cyprus centered on the development and implementation of blockchain solutions.

For this, the two firms have joined forces with Invest Cyprus, the national investment partner of the Republic of Cyprus.

The three companies have signed a memorandum of understanding (MoU) for a "strategic collaboration" – to establish a framework for blockchain initiatives.

"This collaboration signifies a change in direction towards a prosperous Cyprus in the next digital age," Invest Cyprus states.

"To facilitate a new digital age through blockchain technology VeChain and Cream will make suggestions to Invest Cyprus including policy reform that enables blockchain as an underlying infrastructure for operations and financial services," it explains.

"The parties will work together to accomplish several national level investment strategies involving the advancement of blockchain technology and blockchain powered economies. This cooperation will show the use of blockchain technology in financial services, investments and economic reform moving into many other aspects of society, in the context of government policy developing a new era of blockchain technology in Cyprus."

According to Cyprus Invest, this tie-up "represents the single largest venture into blockchain technology in Cyprus to date and aims to introduce a new framework that is transparent, fair, and in compliance with AML and KYC, EU laws, regulations and best practices, which will also create value and further improve economic development on Cyprus".

To VeChain's co-founder and CEO, Sunny Lu, the partnership "represents the true competency for global change embedding trust, transparency, and fairness to the core of our society".

Jackson Fu, co-founder and managing partner of Cream, says Cyprus is "the first nation to fully support the development of the blockchain technology" and the initiative is "a wonderful opportunity to make trust and fairness commonplace in the next digital age".

Michalis P. Michael, chairman of Invest Cyprus, says his company wants to be at the forefront when it comes to the fintech and blockchain sectors development. Invest Cyprus is the government's dedicated partner responsible for attracting and facilitating foreign direct investment (FDI) in the country's key economic sectors.

Tanya Andreasyan

RBS tests its SME digital entity Mettle

Royal Bank of Scotland (RBS) has launched its standalone SME digital entity Mettle as it looks to maintain profit and see off the many UK competitors.

The beta version of Mettle is now ready with the offer of a business current account. It will provide a sort code, account number and payment card; instant invoicing; and the option to add receipts to transactions and track expenses from a phone.

To some it may be seen as a new bank, but in its FAQs Mettle says very clearly it is not a bank and instead currently operates as an agent under an e-money licence held by PrePay Solutions (PPS), which is regulated by the Financial Conduct Authority (FCA). Any deposit placed with Mettle will not be Financial Services Compensation Scheme (FSCS) protected.

Mettle is looking for "early access" users. This is a stage of the product where it wants user feedback.

The project was done with the participation from consultancy firms Capco and 11:FS and RBS's subsidiary NatWest.

RBS has a number of digital plans underway. As reported in April, it was also progressing with its mobile bank initiative – called Bó – with plans to move one million customers onto the new offering.

The business model will focus on "marketplace" banking, enabling customers to "switch and save" on financial products from RBS as well as a range of its partner fintech firms. RBS will earn commission on this.

In August, Starling Bank signed a contract to provide payment services to support the digital bank ambitions of RBS and NatWest.

In one of those "assist but rival" contradictions that exist in fintech, Mettle's business account will be up against Starling's version, which was launched in March.

RBS remains government-owned, following its bailout during the financial crisis a decade ago. It unsuccessfully tried to carve out a separate bank under the Williams & Glyn brand, sinking £345 million into the project and giving up after three years (defeated by the tech complexities).

It was then mandated by the government to set up a £750 million fund for smaller banking players in the UK that offer business current accounts and lending.

Antony Peyton

NEWS

Red Hat to be acquired by IBM in "game changing" $34bn deal

IBM has reached a definitive agreement with Red Hat to acquire it for approximately $34 billion ($190 per share in cash).

"The acquisition of Red Hat is a game-changer. It changes everything about the cloud market," states Ginni Rometty, IBM chairman, president and CEO. "IBM will become the world's #1 hybrid cloud provider, offering companies the only open cloud solution that will unlock the full value of the cloud for their businesses.

"Most companies today are only 20% along their cloud journey, renting compute power to cut costs," she said. "The next 80% is about unlocking real business value and driving growth. This is the next chapter of the cloud. It requires shifting business applications to hybrid cloud, extracting more data and optimising every part of the business, from supply chains to sales."

"Open source is the default choice for modern IT solutions, and I'm incredibly proud of the role Red Hat has played in making that a reality in the enterprise," says Jim Whitehurst, president and CEO of Red Hat. "Joining forces with IBM will provide us with a greater level of scale, resources and capabilities to accelerate the impact of open source as the basis for digital transformation and bring Red Hat to an even wider audience – all while preserving our unique culture and unwavering commitment to open source innovation."

The two companies say that together they will usher in hybrid multi-cloud adoption, drawing on their "shared leadership in key technologies", such as Linux, containers, Kubernetes, multi-cloud management, and cloud management and automation.

IBM's and Red Hat's partnership has spanned 20 years, with IBM serving as an early supporter of Linux, collaborating with Red Hat to help develop and grow enterprise-grade Linux and more recently to bring enterprise Kubernetes and hybrid cloud solutions to customers. These innovations, according to IBM, have become core technologies within the tech giant's $19 billion hybrid cloud business.

IBM and Red Hat claim that between them, they have contributed more to the open source community than any other organisation.

IBM states it will remain committed to Red Hat's open governance, open source contributions, participation in the open source community and development model, and fostering its widespread developer ecosystem.

In addition, IBM and Red Hat will remain committed to the continued freedom of open source, via such efforts as Patent Promise, GPL Cooperation Commitment, the Open Invention Network and the LOT Network.

IBM and Red Hat also say they will continue to build and enhance Red Hat's existing partnerships with other cloud providers, such as Amazon Web Services (AWS), Microsoft Azure, Google Cloud, Alibaba etc, in addition to IBM Cloud.

"Upon closing of the acquisition, Red Hat will join IBM's Hybrid Cloud team as a distinct unit, preserving the independence and neutrality of Red Hat's open source development heritage and commitment, current product portfolio and go-to-market strategy, and unique development culture," IBM explains.

Red Hat will continue to be led by Jim Whitehurst and Red Hat's current management team. Jim Whitehurst also will join IBM's senior management team and report to Rometty.

IBM says it intends to maintain Red Hat's headquarters, facilities, brands and practices.

SHOW ME THE MONEY

IBM emphasises that the acquisition of Red Hat "reinforces its high-value model", accelerating its revenue growth, gross margin and free cash flow within 12 months of closing.

"At signing, the company has ample cash, credit and bridge lines to secure the transaction financing," IBM says. It intends to close the transaction through a combination of cash and debt.

The acquisition has been approved by the boards of directors of both IBM and Red Hat. It is subject to Red Hat shareholder approval.

It also is subject to regulatory approvals and other customary closing conditions, and is expected to close in the latter half of 2019.

Tanya Andreasyan

ANZ and Moneythor partner for "financial wellness" venture

Moneythor, a Singapore-based fintech that offers a digital banking toolkit powered by artificial intelligence (AI), has been selected by ANZ in Australia.

According to Moneythor, the initial deployment "will focus on helping customers achieve their savings goals with personalised spending insights and actionable nudges".

Joe Lewis, programme director, data at ANZ, says the bank is keen to help customers "understand where their money is going and to assist them in building savings habits". The Moneythor technology – with its built-in transaction data analytics and its nudge engine – will be "a core component" of this initiative, he says.


ANZ, Melbourne

Olivier Berthier, CEO of Moneythor, adds his team is excited to "deliver a digital service truly putting the customers' financial wellness at its core".

Moneythor was founded in 2013. Among its customers are Standard Chartered in Asia and Orange Bank in France.

Tanya Andreasyan

Bank Zero launches trial in South Africa

Bank Zero, a new challenger mutual bank in South Africa, has launched its first trial runs.

The bank had been registered as a mutual bank effective 17 August 2018. It received a provisional licence back in January of this year by the South African Reserve Bank (SARB).

Lezanne Human, co-founder and executive director, explains: "Settling directly with the SARB rather than through a 'sponsoring bank' enables us to participate directly with peer banks in the movement of money. We now have the ability to control our payments value chain, which forms a powerful foundation for innovative and cost-efficient offerings."

During September 2018 Bank Zero integrated with the national payments systems of the SARB. This followed two collaborations with IBM and Mastercard.

Mastercard and Bank Zero are currently developing a "new generation of card" to deliver security and other unique features.

IBM provides Bank Zero with security on its open-source based LinuxONE enterprise server through its encryption technology.

Michael Jordaan, Bank Zero's co-founder and chairman, says on Twitter the bank is in the process of testing its new app and "the revolutionary new core banking system".

The bank was co-founded by former senior executives of FNB: Human, Jordaan and Yatin Narsai.

It will be mobile-driven, 45% black-owned and 20% women-owned.

"The mutual banking concept mirrors current social media trends and benefits customers by allowing for the support and creation of financial communities," Bank Zero says on its website. "It also provides for a capital efficient framework, and Bank Zero will be sharing the subsequent cost benefits with its customers."

The other three South African mutual banks are Finbond, GBS and VBS.

In the past decade, there have only been three new banks licensed by SARB: Discovery Bank, Post Bank and TymeDigital.

Discovery Bank is a subsidiary of South Africa's insurance group, Discovery, and was launched a couple of years ago.

Post Bank was created by South African Post Office in 2017 as an affordable bank to help South Africans save money.

TymeDigital belongs to Commonwealth Bank South Africa (CBSA) and stems from fintech TYME (which stands for "take your money everywhere"), bought by CBSA in 2015. CBSA says it is building "a full service digital bank" and obtained a banking licence for TymeDigital in August 2017.

Last year, *Banking Technology* reported that South African start-up Bettr Finance was preparing to launch its mobile banking service.

Henry Vilar

Goldman Sachs acquires financial modelling firm ClearFactr

Goldman Sachs has acquired New York-based financial modelling and spreadsheet software firm ClearFactr as it ramps up its tech strengths.

ClearFactr offers a Software-as-a-Service (SaaS) solution with validation, analysis, and collaboration features. The bank will look to use the firm's process and data integration via APIs to boost its tech capabilities in this field.

ClearFactr isn't one for clear talking as it offers details which are lighter than a miniature hot air balloon. It simply says it was founded in 2013 by Dean Zarras and was acquired by Goldman Sachs in November 2018. Financial details were not disclosed.

However, Zarras doesn't hang about as his LinkedIn profile now says he is an MD for the bank. He has had plenty of experience in the industry, including as a partner/CTO/chief architect for Sesco Enterprises.

He was also MD at Allegheny Energy Global Markets, where he designed and developed two systems used for bidding and scheduling the firm's power generation and for tracking and valuing the resulting trading positions

ClearFactr was a one-man operation. Josh Elwell, managing partner at ValueStream Ventures, was a planned CEO hire but in the end became an advisor to the firm.

Antony Peyton

Westpac invests $800m in digital revamp

Out of a total investment spend of $1.4 billion, Westpac has revealed it invested more than $800 million in system upgrades and its digital transformation plan.

In its latest full year financial results, the Australian bank says it has migrated 100 applications onto its cloud infrastructure platforms "which are now largely complete". Additionally, it has over 120 APIs in production and another 180 in development.

Westpac CEO Brian Hartzer adds: "These capabilities support our customer service hub which is progressing to schedule."

As reported last year, Westpac embarked on a major project to roll out a new data integration solution – Oracle Customer Hub – bank-wide. The project will take three years in total, it is understood, starting with the bank's consumer mortgage business line.

The news follows on from June when it made the jump and moved all its core banking applications into its brand new private cloud environment. That move was in preparation for open banking, with mainly regulatory apps having been moved, as well as a giant customer service hub.

Elsewhere in the results, its statutory net profit was AU$8.09 billion ($5.8 billion), up 1%. Hartzer says: "In a difficult year, Westpac delivered a flat financial result."

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.

Meanwhile, rival National Australia Bank (NAB) plans to migrate 35% of its IT application portfolio to the cloud within the next three to five years (see p6).

Antony Peyton

BGL Group acquires PFM app Bean

BGL Group, a digital distributor of insurance and household financial services, has signed an agreement to acquire Saverd, the company behind personal finance management (PFM) app Bean.

The acquisition is subject to regulatory approvals. BGL says it plans to develop the Bean proposition and "in so doing develop a new capability to support group-wide digital aspirations".

BGL is largely known to the UK consumers for its comparison site comparethemarket.com.

UK-based Bean gives customers the ability to find, track and manage their bills and subscriptions in one app by linking to their bank accounts.

Bean's team will join BGL on completion and will be based at the group's digital innovation hub at White Collar Factory in London's Shoreditch area.

"The deal marks BGL's first steps into the Open Banking market and reflects both the group's growth strategy and its stated ambition to explore and develop new ventures," BGL says.

Matthew Donaldson, CEO of BGL Group, notes that the Bean founders and the team "have huge talent and a good start-up product".

Peter Myatt, CEO and founder of Bean, says: "We've had a fantastic journey building Bean over the past two years, and we're really proud of what we've created and how we are helping people manage their regular spending.

"We know that Open Banking offers a wealth of opportunity, and combining Bean with BGL's scale and distribution expertise is the perfect way for us to unlock the potential of this business and bring the benefits to more customers."

Tanya Andreasyan

HSBC Bank USA hit by data breach

It seems no one can stop the breaches as cyber attackers have got hold of customer data belonging to HSBC Bank USA.

According to a "notice of data breach" sent to affected customers on 2 November, HSBC Bank USA said a number of online accounts were accessed by unauthorised users between 4 October 2018 and 14 October 2018.

The data stolen includes full name, mailing address, phone number, email address, date of birth, account numbers, account types, account balances, transaction history, payee account information, and statement history.

The notification says: "When HSBC discovered your online account was impacted, we suspended online access to prevent further unauthorised entry of your account."

Ilia Kolochenko, CEO and founder of web security company High-Tech Bridge, adds: "Allegedly, only US customers are affected, thus it may indicate that the breach occurred via an authorised third-party or careless employee."

To try and mitigate the issues (and anger if you check Twitter), the bank is offering customers "complimentary" Identity Guard subscription "given increased identity theft attack expectations". This provides an extra layer of security. Customers need to activate it by ringing up or going to the bank's site.

These data breaches are almost like the Borg in Star Trek. No one seems able to halt them.

Some recent examples include Equifax getting fined £500,000 for its UK security breach; and UK banks battling to deal with the British Airways data breach.

Antony Peyton

UK fintech and FIs get dating guide

Business standards company BSI, in association with the Fintech Delivery Panel, has launched new guidance to improve engagement between fintech companies and financial institutions, claiming to be "the first of its kind in the UK".

These guidelines aim to accelerate fintech growth and reinforce the UK's place as a global centre of innovation in financial services.

The new guidelines have been developed through sponsorship from the government-backed Fintech Delivery Panel – an initiative run by Tech Nation – and are part of HM Treasury's Fintech Sector Strategy.

The document has been jointly created by Royal Bank of Scotland, Barclays, HSBC UK, Lloyds Banking Group, and Santander; banks sitting on the Fintech Delivery Panel.

Fintechs such as MarketInvoice, The ID Co., and iwoca, have also contributed to developing the guidelines.

Anil Stocker, CEO and co-founder at MarketInvoice, says: "There is a lot of guidance that can really help young fintechs. For me, culture is key. Both parties need to know and agree on a central mission in partnering. In our case, it was always about ensuring the highest level of customer service in helping UK businesses."

The Publicly Available Specification (PAS) seeks to set the UK apart by clarifying the process for fintech companies and financial institutions alike. It aims to reduce time, cost and risk for all parties.

The guide also provides an explanation of both the commercial considerations and the necessary checks and controls that need to be satisfied to meet business and regulatory demands.

This includes recommendations on preparation, data gathering, due diligence, onboarding, commercial and contractual processes, as well as data protection and information security considerations.

Henry Vilar

Umpqua Bank sells fintech unit to banking tech firm Kony

In a fintech-techfin world, it is usually banks that acquire technology from fintech companies, and not the other way around. However, enterprise application company Kony is changing that narrative.

The Texas-based tech company is purchasing the assets of Pivotus, the innovation subsidiary of Umpqua Bank. The financial terms of the deal were not disclosed.

Umpqua launched Pivotus in 2015 to serve as an environment where it could quickly develop, test and deploy new banking solutions for Umpqua. Cort O'Haver, Umpqua Holdings' president and CEO, says: "Finding a smart home for Pivotus – with the capital, technical expertise, and customer focus – is important for Umpqua moving forward, and Kony is a terrific partner."

Kony anticipates the acquisition will augment its Kony DBX digital banking applications, which was launched earlier this summer to help banks.

As a part of the deal, Umpqua will help Kony to continue developing the Pivotus Engage platform.

Launched earlier this year, Engage helps banks offer a consistent user experience that maintains a human touch across multiple channels. After the acquisition is finalised, Kony will rename the tool Kony DBX Engage.

"Our partnership with Umpqua, combined with the talented Pivotus employees and the innovative technologies they've developed, is a landmark combination that will deliver high impact solutions for financial institutions around the globe," states Thomas Hogan, chairman and CEO of Kony.

Julie Muhn, Finovate

Three UK and Meniga team for Wuntu Money app

Three UK, a UK telco and internet service provider, has teamed with Iceland-based fintech Meniga to develop Three UK's Wuntu Money mobile app.

This is understood to be Meniga's first client in the UK.

Wuntu – a free rewards app available to Three UK customers – was introduced in early 2017 and provides money-saving offers, competitions and giveaways.

Iain Herd, Three UK, at Meniga's FIN42 event in Reykjavik

Whilst there are no plans to launch its own financial products, Three UK is looking to grow its money management proposition, said Iain Herd, head of fintech at Three UK, at Meniga's recent conference in Iceland, FIN42.

The focus is on the existing customers of the mobile operator – to improve customer engagement, deepen the relationship and increase loyalty to the brand, he explained.

Wuntu Money is positioned as "your personal money coach" and will be used as the telco's "foundation" to help customers build "healthy financial habits".

"We looked at the technology providers in this space and their products all looked the same – similar functionality and layout of bars and charts," Herd said. "Meniga stood out – they really explore the customer to understand how to help clients with their money management."

So what will Three UK and Meniga bring to the table in this partnership? Three UK has a strong customer base (over ten million clients), understands the UK market (the company was launched in 2003), and an experienced and creative marketing team (it mainly targets millennials), according to Herd.

Meniga, meanwhile, brings "product excellence, solid understanding of consumer personal financial management (PFM) behaviours and flexible approach".

The offering will be developed, tested and rolled out in the course of a year. "It's a marathon rather than a sprint," Herd noted. In due course, the app might partner with banks and financial institutions "to bring the right products and services" for its customers.

Elsewhere, Meniga has gained its first client in Southeast Asia – Singapore-based United Overseas Bank (UOB). Meniga will power the bank's data enrichment and categorisation tools for UOB's digital banking customers, helping them keep track of in in real time of their savings and expenses, and prompt them to make smarter decisions in managing their finances.

In other news, Meniga received a €3 million investment from Íslandsbanki, bringing total investment in the company from banks this year to €9.1 million.

The fintech firm says it will use the money "to enhance product research and development".

The two companies already have a "long-running partnership", according to Georg Ludviksson, CEO and co-founder of Meniga. Íslandsbanki was among the vendor's very first clients – it worked with Meniga on the launch of its first personal finance management (PFM) solution in Europe in 2009.

In 2017, Íslandsbanki deployed Meniga's personalised reward programme, which provides the bank's customers with cashback offers tailored to their individual spending profile.

Birna Einarsdóttir, CEO at Íslandsbanki, says Meniga's software is a "key part" of the bank's effort to improve its customers' digital banking experience.

Tanya Andreasyan

Canada's Zag Bank to be canned

As the result of a decision taken by the bank's shareholder, Desjardins Group, Canada-based Zag Bank will begin winding down its operations with a target of Q2 2019 for closure.

According to the bank, depositor funds and accrued interest are "entirely safe", backed by Zag and Desjardins.

"As it commences the wind down, the group will continue to support and maintain the bank's obligations towards its depositors, clients and employees", says David Raju, president and CEO of Zag Bank.

In terms of the decision to end it all, Denis Berthiaume, senior EVP and chief operating officer of Desjardins, explains: "We recently reviewed our activities in Ontario and in the Western and Eastern provinces and decided to concentrate our efforts, resources and investments on innovation and growth in P&C insurance, wealth management and payment services.

"As a result, we determined that an online or direct bank was no longer a strategic fit with our long-term strategy."

Clients can withdraw the funds in their high interest savings accounts if they choose, but the bank is no longer opening any new accounts or accepting new deposits.

On 1 December 2018, remaining deposits in high interest savings accounts will be returned to clients who haven't already withdrawn their funds.

Zag employs "approximately" 60 people based in Calgary, Toronto and Montreal. Desjardins says: "Each of them will receive the necessary support to pursue new opportunities within Desjardins Group and beyond."

The last word in that sentence sounds ominous.

The financial impact of Zag Bank's wind down will mainly be accounted for in Desjardins' Q3 financial results. Since it represents less than 1% of the group's assets, it will not be "significant".

Zag, formerly Bank West, a federally regulated bank founded in 2003, was acquired by Desjardins in 2011 as part of the acquisition of Western Financial Group.

In 2014, it was renamed Zag Bank and repositioned as a direct bank, offering various financial products through online and mobile applications to consumers across the country, except in Quebec.

Antony Peyton

Visa and Billtrust team to digitise US B2B payments with Business Payments Network

Visa and Billtrust have joined forces to develop Billtrust's Business Payments Network (BPN), which is designed to streamline the delivery of electronic business-to-business (B2B) payments to suppliers.

The new project builds on the "strategic relationship" by the two firms embarked on in 2017. It started with the integration of Billtrust's Virtual Card Capture and Visa's Straight Through Processing solution.

"Billtrust's BPN will further the multipronged strategy Visa and Billtrust are pursuing to reduce friction and streamline payment processes and reconciliation for financial institutions, corporate buyers and B2B suppliers," the companies explain.

At present, paper cheques still represent around 51% of US B2B payment volumes (according to the 2016 AFP Electronic Payments Survey). "The ubiquity of cheque acceptance in the US has been a key reason it has remained the leading form of payment despite its many disadvantages," Billtrust and Visa explain.

"Buyers and suppliers have already recognised the advantages of digitiSing payments, including less manual touch, improved fraud controls and enhanced reconciliation. However, the current lack of connectivity between existing B2B payment platforms remains the largest barrier to adoption. Suppliers simply don't have the systems and processes in place to accept the increasingly complex forms of payment that buyers and their financial institutions want to send."

BPN is designed to address current industry challenges by:

- providing a connected platform for suppliers, buyers, financial institutions, and accounts payable and accounts receivable software providers;
- publishing an online directory that contains a full view of participating suppliers and their payment acceptance preferences;
- providing financial institutions and corporate buyers with ability to deliver digital payments directly to the suppliers' acceptance platforms;
- enabling complex financial and payment data to seamlessly come together at scale while delivering streamlined reconciliation to suppliers and buyers.

"Today, suppliers have to balance their own payment preferences with the preferences of their customers' accounts payable departments – and those two preferences don't always sync up," observes Flint Lane, CEO of Billtrust.

"BPN is designed to close the loop on the electronic payment cycle in a more transparent and secure way to more closely replicate the way consumers today pay and get paid, quickly, simply and seamlessly. Creating this type of customer experience in the B2B space is extremely important to us and the industry."

"With estimates showing the US B2B payments market in the range of $24 trillion annually (Visa Commercial Consumption Expenditure Index, 2015), streamlining efficiencies by adopting innovations such as virtual card payments and other digital payment types can lead to billions of dollars saved," comments Roger Williams, SVP of commercial card at Commerce Bank.

Tanya Andreasyan

The transformation of the European payments landscape

Banking Technology **spoke to** ***Isabelle Oliver,*** **Head of Securities Initiatives & Payment Market Infrastructures at SWIFT, about the transformation of the payments landscape and SWIFT's recent white paper which explores the drivers and likely outcomes of a new European payments landscape.**

"Instant payments are becoming the new normal. It's an accelerating global trend and at SWIFT we see it as the main driver of innovation breathing new life into the financial ecosystem."

In her view, wholesale and retail payments around the globe are redesigning and renewing, which allows for "greater" operational and collateral/liquidity efficiency. This in turn inspires more innovation – something the entire fintech industry seeks with great ardour.

Within this lively context SWIFT has produced a white paper 'The transformation of the European payments landscape' which looks at the drivers for change and outlines the challenges and opportunities for incumbents.

Olivier believes the changes in both technology and customer expectation creates an opportunity to innovate and to move away from batch processing and legacy systems. She explains that customers now expect to have a certain quality around their experiences.

"They want fast, frictionless and borderless payments that are embedded in transaction chains and ecosystems. Corporate customers too want the same thing and they also need greater visibility and predictability as regards delivery times."

It's a fair point as humanity has become obsessed with the desire for speed. You may well argue impatience has set in but others might respond that great expectations are a reasonable request.

The white paper, ties in these changes with infrastructure renewal. In Europe, the Eurosystem has set a clear path for financial market infrastructure renewal. This, along

Isabelle Oliver, SWIFT

with regulations such as the Second Payment Services Directive (PSD2), means that the rise of instant payments is well underway with many domestic initiatives either live or in the process of implementation; SWIFT goes live with the EBA CLEARING's pan-European RT1 and the Eurosystem's pan-European TARGET Instant Payment Settlement (TIPS) in November 2018.

In addition the global adoption of the ISO 20022 standard is progressing rapidly, with TARGET2 set to migrate in 2021, and EBA CLEARING's EURO1 and cross-border payments on SWIFT set to migrate in the same timeframe.

Olivier reckons the result is that the industry will benefit from a much richer data environment that will in turn enable better services, making payments just one step of a transaction chain that is fast, frictionless and price transparent. For those seeking clarity, she states that "better transparency as well as speed will also make reconciliation and liquidity management easier".

The white paper also looks at the other drivers; the maturity of technology and the new entrants to the market that have the technology and the agility to shake up the ecosystem.

"This is forcing traditional players to either collaborate with new entrants or innovate in their own right to compete," she says.

Having seen or written many fintech stories on partnerships and creativity, it would be hard to argue with Olivier's viewpoint.

In banking no one can afford to sit still. She explains that the incumbents "need to reinvent themselves and find new ways of doing business that meet customer needs and innovate with technology to make the most of their considerable assets" – such as customer bases and data; risk management capabilities; balance sheet strength; industry knowledge and trust.

With this scenario in mind, Olivier believes SWIFT is at the forefront of contributing to this shift. This comprises expertise with migration and the initial go live phase as well as managing its services within a single window environment.

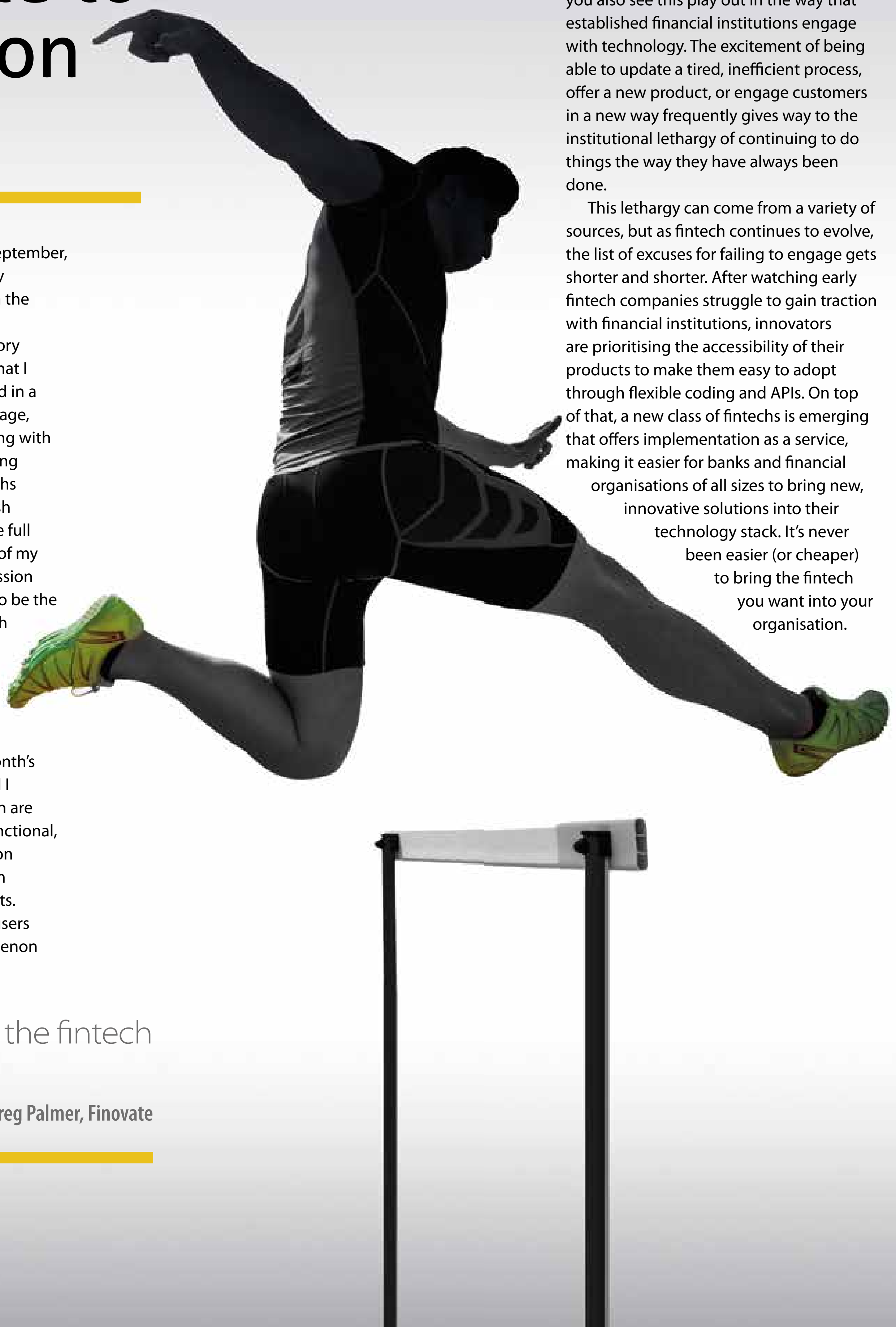
"One key offering is the training we are putting together on the upcoming challenges and milestones, which will cover ISO20022 adoptions, deadlines, impacts of Instant Payments and T2-T2S consolidation project as well as migration approach and project management."

It will be intriguing to see what this training entails… perhaps all will be revealed at Sibos London 2019. **bt**

To download a copy of "The transformation of the European payments landscape" whitepaper, please visit the SWIFT website: **www.swift.com/resource/transformation-european-payments-landscape**

The biggest hurdle to financial institution future-proofing

By *Greg Palmer*, VP, Finovate



FinovateFall wrapped up in late September, and it was fantastic to see so many innovators and thought-leaders in the same room.

There were a lot of potential story lines to write about, but the one that I found most fascinating culminated in a live Breaking Banks taping from stage, where I had the pleasure of chatting with Jim Marous, JP Nicols, and Brett King about the challenges facing fintechs and banks as they continue to push the fintech landscape forward. The full podcast is worth a listen, but one of my biggest takeaways from the discussion centered around what I perceive to be the biggest hurdle right now to fintech innovation and implementation at financial institutions: a corporate culture that prioritises the short-term over long-term future-proofing.

If you read my article in last month's issue of this magazine, you'll recall I talked about "$2 bill fintech," which are fintech solutions that are legal, functional, but struggle to gain wider adoption because they are outside the norm of what the average person expects. That article focused on how end-users contribute heavily to this phenomenon (consumer behavior in the banking space is notoriously difficult to change), but you also see this play out in the way that established financial institutions engage with technology. The excitement of being able to update a tired, inefficient process, offer a new product, or engage customers in a new way frequently gives way to the institutional lethargy of continuing to do things the way they have always been done.

> "It's never been easier (or cheaper) to bring the fintech you want into your organisation."
>
> Greg Palmer, Finovate

This lethargy can come from a variety of sources, but as fintech continues to evolve, the list of excuses for failing to engage gets shorter and shorter. After watching early fintech companies struggle to gain traction with financial institutions, innovators are prioritising the accessibility of their products to make them easy to adopt through flexible coding and APIs. On top of that, a new class of fintechs is emerging that offers implementation as a service, making it easier for banks and financial organisations of all sizes to bring new, innovative solutions into their technology stack. It's never been easier (or cheaper) to bring the fintech you want into your organisation.

> "What is surprising is that there are still a huge number of financial institutions who are resistant to the changes that are revolutionising their industry."
>
> Greg Palmer, Finovate

While fintechs are making strong strides towards making their products more accessible, end-users are also increasingly comfortable bringing more tech into their banking relationship. The idea of using a phone to move money between your friends or complete an in-person purchase at a retailer is no longer as scary as it used to be, for example.

And banking customers are also demanding more from their online banking experience. They expect their bank's web page to offer personalised functionality like the other websites they do business with, which increasingly offer a unique, tailored experience based on a user's purchase history, demographic information, and so on.

There are undoubtedly consumers who are still hesitant to engage with technology in a banking capacity, but the winds are shifting, and they are shifting quickly – adoption of new technologies happens spreads like wildfire once the momentum gets going.

With fintechs making it easier and cheaper to implement their products, and end users becoming more comfortable with (and starting to demand more) high-tech banking solutions, it's no surprise that we're starting to see some significant movement from some of the large players in the space.

What is surprising is that there are still a huge number of financial institutions who are resistant to the changes that are revolutionising their industry. I understand that the pressure to constantly deliver positive results to shareholders can be massive, and that it can be difficult to find the resources in the short term to tackle some of the big challenges that innovation will undoubtedly present.

But on the flip side, banks are more exposed and more vulnerable to serious competition than they have been at any point in my lifetime.

The long-term future of every financial institution will depend on how far ahead they're able (willing?) to look, and how quickly they can break out of the institutional lethargy that encompasses a large part of the market right now. Banks that don't start taking concrete steps to bring new tech platforms into their offerings will increasingly find it more difficult to catch up. Break out of the institutional cycle now or risk falling irrevocably behind. **bt**

A series of initiatives support Citi's business clients in the quest to do business in real time. We speak to Citi treasury and trade solutions' Ireti Samuel-Ogbu, EMEA head payments and receivables, and Magdalena Mielcarz, EMEA head of channel and enterprise services.

Terms of endearment

For Citi's corporate clients, the move to a streamlined digital world has also brought about process automation and a move to real time and visibility within processing. The demand for this, and the technological capability to do so, has happily dovetailed with the move to Open Banking, which enables greater connectivity through API data flows.

Samuel-Ogbu comments: "In terms of changes of context, we are seeing a general shift from batch to real time as evidenced by APIs, real-time payments and the like. In turn, this is enabling customers to benefit from real time capabilities across the service spectrum, from real-time visibility to real-time payments and funding management."

She explains that real-time payments systems, when combined with API technology, can enable secure data exchange in real time between the banks and its clients. Additionally, with the emergence of Swift global payment innovation (gpi), customers also receive real-time tracking of cross-border transactions.

Another key lever, she adds, is the Open Banking framework across Europe (with PSD2 and UK Open Banking) that will deliver new value add for corporates, both in terms of new payment solutions and enhanced multi-banking services via open APIs.

"The old-fashioned file-based EDI approach does not do justice to the modern real-time payments."

Ireti Samuel-Ogbu, Citi

OPEN BANKING

The potential opportunities afforded by Open Banking have received a lot of attention. Citi is one of the first banks to join the UK's Open Banking directory as a payment initiation service provider (PISP) and now intends to leverage Open Banking to provide an aggregated collections service for its business clients, tapping the standardised open APIs of the country's largest nine banks.

Samuel-Ogbu comments: "Open Banking is part of a wider shift in the global banking landscape to a real-time, hyper connected environment. We see Open Banking as a significant development in Europe and increasingly in other regions as regulators seek to drive competition and innovation in financial services. Open Banking in the UK is particularly attractive to us and to our clients, as it can enable collections with open APIs standardised and live across the Competition and Markets Authority nine (CMA9) banks."

She adds: "Citi's vision is to enable global connectivity for our clients to avail themselves of Open Banking services – for real-time payments and collections – thereby insulating our clients from the complexity of bilateral connections to large number of bank APIs."

Such simplicity is "particularly attractive" to clients, she notes.

Ireti Samuel-Ogbu, Citi

"Open Banking in the UK is particularly attractive to us and to our clients."

Ireti Samuel-Ogbu, Citi

CITICONNECT

To enable this, Citi has expanded its API solution through CitiConnect, which takes in real-time information on FX rates, account statements, direct debits, cut-off times, faster payments, and proof of payment.

Mielcarz comments: "CitiConnect is all about automation and integration. It moves the transaction origination from the bank site to the client's own system or application. So our clients' platforms (i.e. ERP or TMS systems, payment apps, etc) connect directly to Citi product processors, with no manual operations in between, meaning there is no need to input transactions individually. This helps in achieving a greater level of operational efficiency and speed."

The platform started life with traditional batch-focused Electronic Data Interchange (EDI), subsequently onboarding SwiftNet FileAct connectivity solutions. Next came the standardisation of file-based interfaces around ISO 20022 XML. The latest step has been to employ API technology to bring client-bank integration to the next level.

"The type of clients using CitiConnect API has changed, with digital natives becoming the fastest adopters. Our clients like the instant payment capabilities, and the straight-through processing nature of the service that unlocks greater efficiency and speed," Mielcarz observes.

"Traditional treasuries, meanwhile, continue to rely on batch processing via CitiConnect for transaction initiation and adopt CitiConnect API mainly for various information inquires and statements."

The CitiConnect platform now accounts for almost 60% of all transactions initiated by clients and over 30 million API calls have been processed this year to date.

The best attribute of the platform is its real-time capability, she says. "API technology is, by its nature, best suited for on-demand services with real-time responses. This is how we see the future of banking connectivity – agile, dynamic and secure – yet open for industry players to build superior services for end-users.

"Emergence of real-time payment schemes around the world is a catalyst for faster adoption of APIs. The old-fashioned file-based EDI approach does not do justice to the modern real-time payments."

SANDBOX

The platform is also linked to a sandbox – the CitiConnect API Developer Portal. This is an online repository where customers access the latest documentation on Citi's APIs in a sandbox environment where

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"There is nothing that developers cherish more than the ability to instantly verify and debug a new piece of code."

Magdalena Mielcarz, Citi

they can perform technology testing and validation. It can accelerate technical development and improve the quality of technology integration. The other benefit to the sandbox environment is that it can be used as a means to onboard.

Mielcarz explains: "Our sandbox, together with a broader developers' portal is a modern way of delivering technical specifications to developers, with the ability not only to learn how various API services work, but to try them as well.

"There is nothing that developers cherish more than the ability to instantly verify and debug a new piece of code."

HIGHRADIUS AND CITI SMART MATCH

To continue with its quest to meet the demand of digital real-time operations, Citi has entered into a strategic partnership with HighRadius Corporation, a fintech enterprise Software-as-a-Service (SaaS) company specialising in cloud-based integrated receivables to launch Citi Smart Match.

In early 2018, Citi made an equity investment in HighRadius in advance of formalising this partnership.

The receivables platform optimises cash flow through the automation of receivables and payments processes across credit, collections, cash application and deductions. Powered by artificial intelligence (AI) the capability enables teams to leverage machine learning (ML) for accurate decision-making with regards to accounts receivable reconciliation.

Samuel-Ogbu explains: "Citi Smart Match provides the means for reconciliation AI-enabled data capture systems which have been designed to consolidate data from multiple sources, enrich data that means very little on


Magdalena Mielcarz, Citi

its own, and match data with open receivables to deliver a comprehensive cash application solution so the client is better informed."

Clients can enhance straight-through reconciliation rates by bringing together disparate pieces of payment data and applying AI and ML enabled business logic to match payments received with expected receipts in a more efficient manner. The idea is to solve the delays that businesses face in applying cash due to a number of challenges; payer identification, missing or incorrect references provided with the payment and lack of visibility of remittance data.

"AI and ML are highly advanced technologies. AI automatically deciphers data, regardless of format or structure, to organise and aggregate. ML identifies patterns and behaviours, continually improving match rates over time, enabling clients to reach STP rates of 90%+," says Samuel-Ogbu.

"Financially, organisations are able to realise reduced days sales outstanding (DSO), lower labour costs, operational efficiencies and improved working capital."

Indeed, with commerce becoming digital as the norm, the ability to have automated and speedy reconciliation completes the process.

Mielcarz adds: "The HighRadius solution is fully integrated with CitiConnect. Clients' open invoices, data can be sent to Citi, and then reconciliation reports are delivered back in an automated manner, without need to physically log in to online interface.

"The scope of services we offer expands all the time. When we launched CitiConnect API 18 months ago, we had seven services in our portfolio. Now this number approaches 30, with many more in the development pipeline," she says. "Banking APIs of today are free of strict boundaries imposed by legacy technologies, allowing us to think big and innovate."

Freedom from boundaries is important with a bank that has licences in over 100 countries.

"The whole move is to support digital commerce by making things frictionless, as straight-through as possible, and eliminating as much latency as possible through the removal of manual interfaces and other friction points." Samuel-Ogbu concludes. **bt**

Alison Ebbage

redhat

Creating open banking to meet expectations

Open banking is not just about enabling free data exchange by using technology, it is also about a change in culture and attitude as part of a holistic strategy. *Rich Feldman* and *Arvind Swami* at Red Hat discuss how by opening up to new providers and third parties, banks can become not just service providers but preferred marketplace platform providers.

The decision making behind creating an open banking platform in a marketplace is not only driven by regulation.

Feldman explains: "Regulation and compliance with PSD2 has prompted thought and application around open banking but the real driver is the banks' need to evolve and satisfy customers. They must respond to the way customers want to do their banking today – and that is not via a branch. Instead they want to access banking products and services in real time through a single, digital interface."

And Swami agrees: "The demand for greater digital experiences means that customers now have expectations around the ease of use and timeliness of their banking transactions, being able to access not just core services but also associated products and services."

Indeed the technology to do this is now proven and has gained widespread acceptance within other verticals – hence the demand from customers.

Swami comments: "To properly do this the bank needs to become very modular with portable services that can be bundled and unbundled as needed – including those built on top of a bank's heritage systems. It also needs to have open standards that link to other ecosystems – benefiting from others in the ecosystem that help get them to market faster and/or help differentiate the bank's approach to service provision and experience."

To fully benefit, however, banks now need to embrace the open source community nature of open banking and see it as an opportunity rather than a threat. This is starting to happen; Feldman thinks around 70% of banks have already engaged with API ecosystems or are in the process of doing so.

"Banks know that applying this technology can help them drive their capabilities and meet the way that people want to do banking now. APIs provide the ability to evolve and bring solutions to market quickly."

"Fintechs can provide the wizardry to fully enable an open banking ecosystem – this is their core proposition as opposed to that of the banks – which is managing assets."

Rich Feldman, Red Hat

Some banks, says Feldman, have recognised that to get the best from open banking a partnership with a fintech works well. "Banks have a well-documented grapple with legacy technology and systems and the funding to innovate is simply not there in the vast majority of cases. Fintechs meanwhile can provide the wizardry to fully enable an open banking ecosystem – this is their core proposition as opposed to that of the banks – which is managing assets."

The danger of not doing this, says Swami is that banks then are relegated to being an increasingly commoditised service provider for others. If they lose the distribution they lose the access to a wider customer base, one that comes along with a broad range of products and services on their own platform. They risk losing the loyalty of their existing customers who want and expect more from their bank.

But he warns that this will take time to change and that the cultural acceptance of the desirability and need to reach out to develop an ecosystem is still in its nascent stages.

Open banking is, says Feldman, a fundamental shift in digital strategy. By looking at the possibilities in a community with a strategic and holistic view, identifying where you can best differentiate, and partnering with those that can make things happen faster – banks can build a meaningful ecosystem to meet customer needs and ultimately promote loyalty. **bt**

Alison Ebbage

FOOD FOR THOUGHT

Existential crises and procurement: the real question behind build/buy/partner

By *Leda Glyptis*

Some people are card-carrying members of one side or the other: not-built-here syndrome sufferers forever pitted against the "we are slow, we are clunky, we think python is a snake, leave it to someone else" brigade.

Some others see no issue with leaving the calibration to the consultants doing the benchmarking and roadmap analysis for pretty much everything. Build or buy pros and cons, on a slide about ten from the back of a diabolically long pack, in a neat two by two grid. You know the type.

Partnering is a fairly new animal in the zoo. It mostly plays in its own space, leaving the big boys to do big boy stuff unperturbed although, increasingly, it is appearing in the traditional build vs buy discussions throwing the grid all out of kilter.

I don't know if this way of making decisions was ever sound. Prevalence is no proof of usefulness and I am hard pressed to see merit in the approach but whatever your view was up until today, I say this approach is dead and anyone who continues to apply it will die with it. And the whole point of business is to keep delivering, keep changing, keep becoming what the clients want. The whole point of transformation is that, when the end happens, it happens to the competition and we are not there to see it.

WHAT ARE YOU?

Existential questions make bankers extremely uncomfortable but at least we can afford therapists.

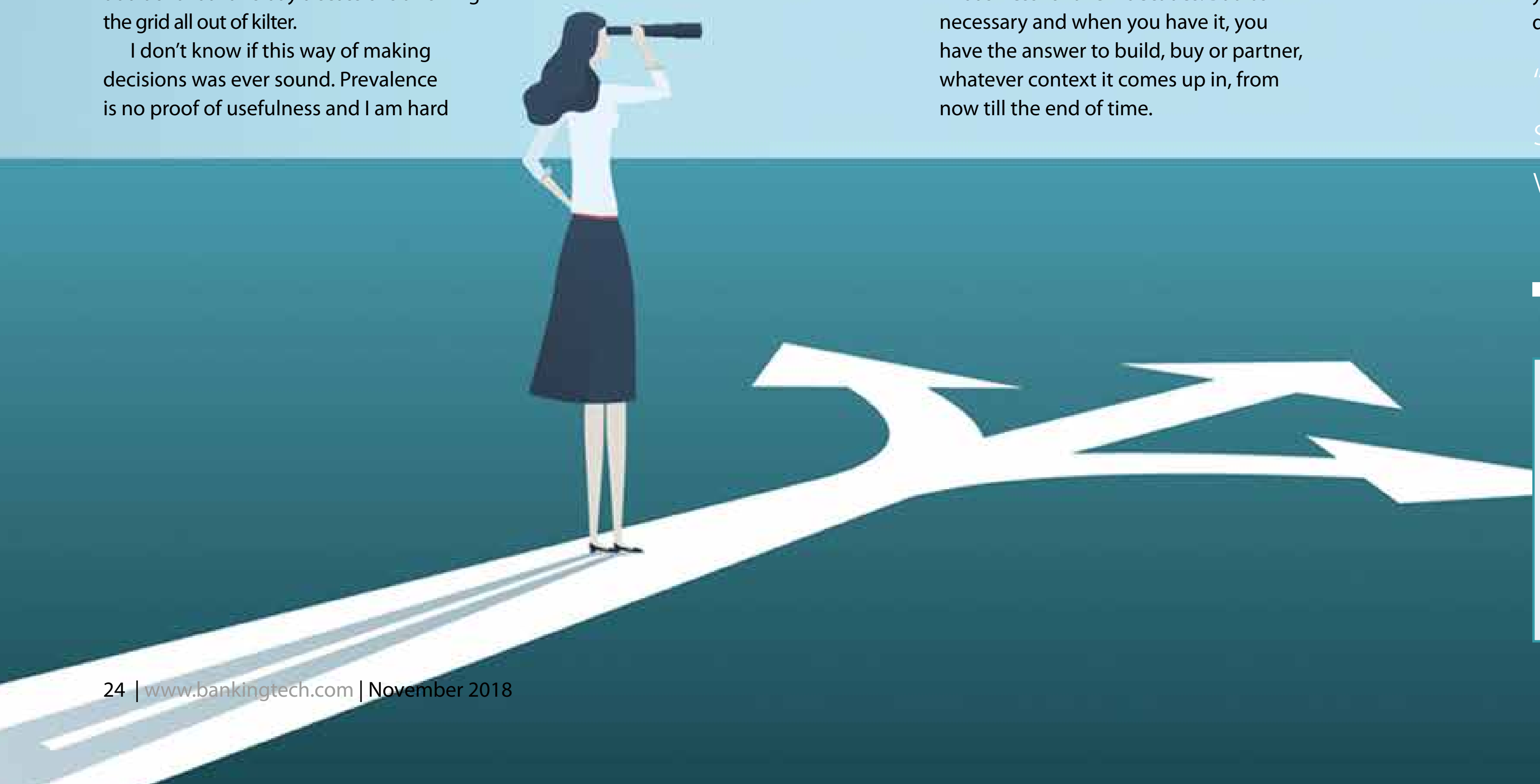
So before you engage in build or buy discussions, agree what you are. No shareholder statements or brand-aligned calls to arms. Explain what you are in terms of what you do that gets you paid in a way a 10 year old would understand. That is what you are now.

Next question: What do you want to be when you grow up?

Is it different to what you are now? There is no wrong answer, by the way.

What will clients pay for in this future of yours? What is it that you will be doing that they will be willing to continue or start paying for?

This is harder than you think, especially if your organisation has been in business for a few decades. But it's necessary and when you have it, you have the answer to build, buy or partner, whatever context it comes up in, from now till the end of time.



WHY ARE YOU?

To make money.

Seriously.

If you are a business and not a social entrepreneur, making money is key. To everything. Because if you don't make money you won't be around long enough to deliver against your purpose and vision, be it building affordable bicycles, creating experimental haircuts or delivering good software. If you don't make money, the end will come for you fast.

So the aim is to do what you do in a way that the clients want to pay for.

Sounds simple?

It is not.

Because the customers keep changing, the market keeps shifting and the competition is constantly proliferating and evolving, sometimes getting on the right side of the art of the possible much faster than you.

Being in business is all about not getting to the end, about keeping yourself in the running and in a shifting landscape, and it is far from easy.

HOW ARE YOU?

That's the key to answering the question build, buy or partner. And I don't mean how are you oh very well thanks and you.

I mean in what manner do you exist, in your perpetual dance of getting paid to deliver against your business purpose.

Since you know what you are, and what you deliver, and what you get paid for, you should have a pretty good idea of how you deliver by now. So here's your key:

For everything that is core to your identity, purpose and value exchange: build. For anything that helps you be, make, differentiate and sustain: build.

Don't build alone, if you don't know how.

But be part of the building, this is the core of your business, if you are absent and aloof while it is being built then the builders will know all that matters to your continued existence and when they walk that knowledge walks with them.

Guard your purpose.

For everything that is ancillary or auxiliary to your purpose, a nice-to-have in a rapidly evolving landscape that you appreciate but don't fully understand, partner. Partner with people who do that thing that you are partnering on as their core. People who built for their purpose. Align on business models – if they make money by undercutting your price point these are not the droids you are looking for. Confirm you can play nice across the board, that you are not parasitic to each other. That your purpose dovetails and aligns with theirs. And then partner.

Learn, grow and deepen your relationships or move to other relationships that are a better fit for your changing market. This is not core. A happy customer is. Partners are travelling companions. Share, cooperate, support each other and if your roads diverge, part amicably and send postcards.

Along the way, as you build and partner, you will buy. A lot.

You will buy components, toolkits and plumbing supplies. Some of what you will buy will be specialist and complex and cost a lot. Contrary to established practice, the price tag doesn't make stuff strategic, what you do with it does: and what you do with it is what your business will live and die by. It's your core and purpose.

If you choose to outsource this or pursue it by partnership and delegation rather than hands-on involvement in the differentiator-building, you won't pay the price immediately. You may even think you played a nifty trick on your competitors, by getting to market faster, cheaper.

But as the knowledge walks out the door, your core walks with them.

As partners see to their core, your purpose may be left behind.

And customers will shift without a second thought, to whatever business delivers what they are happy to pay for

So before the grid and the PowerPoint and the vendor selection, spend some time agreeing what is core and what is key to delivery, survival and business viability. If you don't want to be there to see the end.

"Before the grid and the PowerPoint and the vendor selection, spend some time agreeing what is core and what is key to delivery, survival and business viability."

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.

Women in finance: an economic case for gender equality

Ratna Sahay, deputy director, and *Martin Čihák*, advisor, of the International Monetary Fund's monetary and capital markets department, advocate greater inclusion of women across all aspects of financial services.

Women are underrepresented at all levels of the global financial system, from depositors and borrowers to bank board members and regulators.

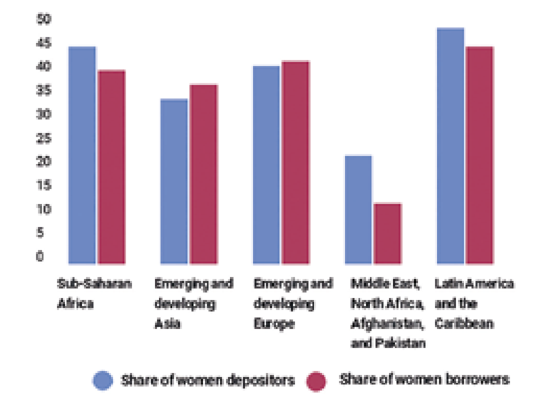
Our new study finds that greater inclusion of women as users, providers, and regulators of financial services would have benefits beyond addressing gender inequality. Narrowing the gender gap would foster greater stability in the banking system and enhance economic growth. It could also contribute to more effective monetary and fiscal policy.

Women on average accounted for just 40% of bank depositors and borrowers in 2016, according to IMF survey results published this year – the first time such data became available. Underlying these aggregate figures are large variations across regions and countries. For example, women accounted for 51% of borrowers in Brazil, compared with only 8% in Pakistan.

Growing evidence suggests that increasing women's access to and use of financial services can have both economic and societal benefits. For example, in Kenya, women merchants who opened a basic bank account invested more in their businesses. Female-headed households in Nepal spent more on education after opening a savings account.

Such benefits illustrate why economic growth increases with greater access to financial services. The same benefits result from increasing female users of these services. More inclusive financial systems in turn can magnify the effectiveness of fiscal and monetary policies by broadening financial markets and the tax base.

Banking on women
Women accounted for just 40 percent of bank depositors and borrowers in 2016.
(in percent)



Source: IMF's 2018 calculations based on 2017 Financial Access Survey pilot on gender-disaggregated data.

INTERNATIONAL MONETARY FUND

WHEN WOMEN LEAD IN FINANCE

What about the financial system itself? Does it matter whether women are represented among bankers and their supervisors?

In a previous paper, we showed that large gaps persist between the representation of men and women in leadership positions in banks and banking supervision agencies worldwide.

We found that women accounted for less than 2% of financial institutions' chief executive officers and less than 20% of executive board members. The proportion of women on the boards of banking-supervision agencies was also low – just 17% on average in 2015.

As with users of financial services, we found considerable regional variation in the presence of women in banking leadership roles. Sub-Saharan African countries had the highest shares of female banking executives, while Latin America and the Caribbean had the lowest. Advanced economies were in the middle.

We found that the gender gap in leadership does make a difference when it comes to bank stability. Banks with higher shares of women board members had higher capital buffers, a lower proportion of nonperforming loans, and greater resistance to stress.

We found the same relationship between bank stability and the presence of women on banking regulatory boards.

What can explain these findings? There are four possible reasons why a higher share of women on bank and supervisory boards may contribute to financial stability:

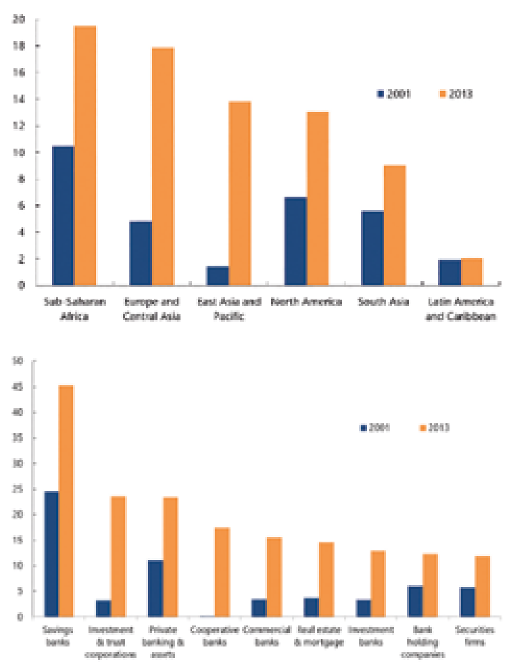
- Women may be better risk managers than men.
- Discriminatory hiring practices may mean that the few women who do make it to the top are better qualified or more experienced than their male counterparts.
- More women on boards contributes to diversity of thought, which leads to better decisions.
- Institutions that tend to attract and select women in top positions may be better-managed in the first place.

Based on evidence in our paper and related literature, we find that the observed higher stability is most likely due to the beneficial effects of greater diversity of views on boards, as well as discriminatory hiring practices that lead to hiring better qualified or more experienced women than men.

Our findings strengthen the case for financial inclusion of women to enhance economic growth and foster financial stability.

We need more research and better data to explain how to achieve these benefits and to identify the conditions that facilitate the entry of women into leadership roles in banks and supervisory agencies. **bt**

Bank boss bias
Women accounted for less than 2 percent of financial institutions' chief executive officers and less than 20 percent of executive board members.
(in percent of total board members)



Sources: Board Executive; and authors' calculations.

INTERNATIONAL MONETARY FUND

"Greater inclusion of women as users, providers, and regulators of financial services would have benefits beyond addressing gender inequality. Narrowing the gender gap would foster greater stability in the banking system and enhance economic growth."

Ratna Sahay and Martin Čihák, IMF

This article was originally published on the IMF Blog

The five attributes of a successful digital banking experience

In a time of rapid advancement in technology, channels and customer expectations, how do you maintain a competitive advantage? In large part, the answer will come down to mobile and digital services.

Those that get it right will increase engagement, loyalty and brand awareness. Those that get it wrong might alienate and drive away customers.

CURRENT AND FUTURE CUSTOMER EXPECTATIONS

A clear view into how well banking providers are meeting the needs of their customers can be found in an annual survey by global financial services technology provider FIS.

For the 2018 "Performance Against Customer Expectations (PACE)" report, FIS surveyed more than 1,000 UK consumers. Mobile banking was identified as the main branch: Most consumers between 18 and 52 turn first to their mobile devices when interacting with their bank.

THE FIVE ATTRIBUTES OF DIGITAL SUCCESS

But what factors need to be considered to create powerful digital self-service apps and similar differentiators?

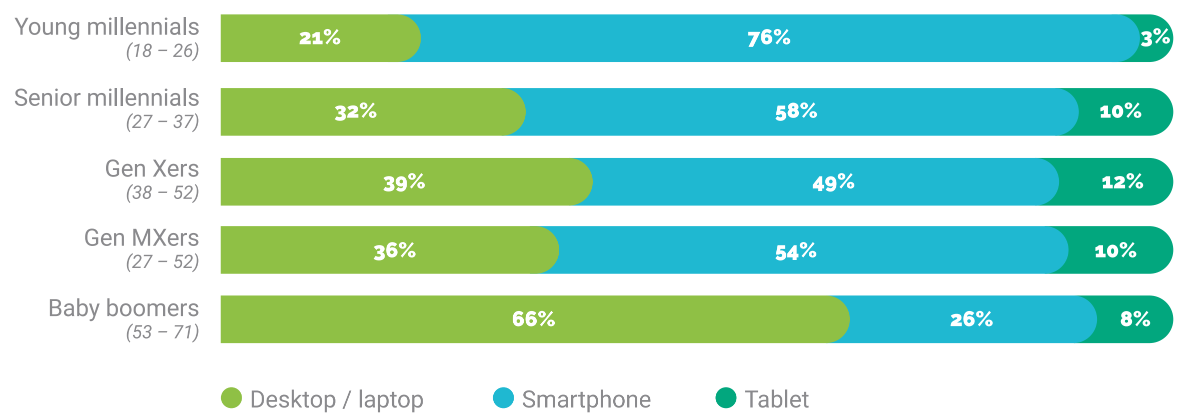
Ahead of everything else is **24/7 borderless convenience**, which means relevant services, any time, anywhere. For digital customers there can be no equivalent of a queue.

That convenience stems from the design of the app but also from slick operations in the background. For standard and cumbersome processes including KYC and AML, artificial intelligence (AI) now allows real-time verification of various documents, potentially using third-party systems. By so doing, banks can optimise the customer experience and significantly reduce costs and time-to-market.

This brings us to the second attribute: **data aggregation**. It is key to create a highly personalised financial management experience. Many customers want a consolidated, single view to manage their finances. Personalised tools enriched by AI-supported analytics mechanisms are becoming a prerequisite to support financial planning.

With open APIs, financial information from multiple sources – including third-parties – can be combined efficiently. For instance, Slovakia-based Tatra Banka, a subsidiary of Raiffeisen Group, has launched a third-party application for mobile on-boarding, claiming it is up to 70% faster than standard bank operations. Using machine learning, neural networks and biometrics, the images on identification documents are matched with uploaded photos of the customers. Using the devices' cameras, the biometrics technology scans customers' eye movements, facial features, and light conditions and authenticates their identity.

Digital Interactions with Banks, by Segment



Source: fisglobal.com/PACE

More generally, the back-end also plays an important role. "The winners will be institutions with an API-ready core banking architecture that integrates with components on a plug and play basis," says Christian Höpker, Head of Digital, Europe at FIS. "With the updated Payment Services Directive – PSD2 – platforms that allow aggregation and the integration of third-party services are essential for digital banking."

This means harnessing the potential of the third attribute – **Open Banking**. With consent for access to data by verified third-parties, customers can benefit from more information and tools to optimise their financial services, carry out faster transactions and receive recommendations based on their specific financial circumstances.

BBVA, for instance, recently became the first bank in Spain with products from different financial service providers on its app. BBVA's tool uses the income and spending of users to provide analysis of their finances. The capability now spans other accounts, cards, investment funds, pension plans, deposits, securities, mortgage and consumer finance products.

Pushed by PSD2, **security** is the next attribute to focus on. The directive requires physical security, access control as well as data and systems integrity and confidentiality – aligned with GDPR and its reinforced data protection guidelines. Preventive security measures are to be established, as well as multi-layered controls such as four-eyes principle and two-factor authentication. With these measures in place, even cautious consumers should recognise that open banking-related benefits finally outweigh its risks.

> "The likelihood is that many of the new entrants will be consumed by other banking organisations."
>
> Christian Höpker, FIS

A proper combination of the above attributes can significantly increase a bespoke banking experience. Advanced analytics enable a deeper understanding of customer behaviour and facilitate customised offers. New services may include tailored dashboards, leveraging themed animations and relevant third-party data to keep the banking experience interesting and engaging.

Finally, there needs to be consideration for the **wider and visionary customer experience**. Banking has started to move to the centre of society. The inclusion of social content improves the customer experience and loyalty, covering integrated videos or help from customer forums, as well as social platforms for customers to share their own experiences.

The next level is likely to be "invisible banking", making banking a seamless part of life, such as by leveraging voice banking applications that don't require a single touch on a device to manage personal finances.

> "The winners will be institutions with an API-ready core banking architecture that integrates with components on a plug and play basis."
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> Christian Höpker, FIS

All steps should be done strategically. KPMG advises ("Forging the Future" report, 2017), to have "a clear fintech strategy that aligns to organisational objectives, considers current assets and capabilities, and includes an execution plan for addressing gaps and managing a transformation that may never have a defined end-point as fintech will continue to evolve".

CONCLUSION

As with any trend, there are threats and opportunities. This is nothing short of a consumer-led revolution and those banks that do not embrace it will lose. Loyalty has to be earned, not taken for granted.

It could be argued that the most likely losers are large, branch-centric banks, but it isn't that black and white. Major banks are only too aware of the threat. A global survey by KPMG of more than 160 financial institutions concludes: "Whether it's providing new ways to enhance the customer experience, responding to regulatory change, underpinning new payments or digital delivery models, making service delivery faster and more cost-effective, or improving the efficiency of back-office functions – the myriad fintech solutions now available, or in development, are helping to rapidly reinvent the entire value chain of financial services."

Increasingly large banks are nurturing, partnering or buying innovative fintechs and providing similar services. An alternative model is to create a digital offshoot bank within the parent bank brand.

FIS's Höpker concludes: "The likelihood is that many of the new entrants will be consumed by other banking organisations. Established banks will respond and rise to the new challenges, but some inflexible organisations also might disappear. Open APIs enable financial institutions to embrace fintechs rather than competing with them, as well as to offer new services to customers quicker and not wasting too much of their own capacity." **bt**

Fintech funding round-up

A compilation of money givers and receivers over the last month.

London-based challenger bank **Monzo** has closed a new funding round raising £85 million. This is part of its quest to reach a $1.5 billion valuation.

The round was led by General Catalyst, alongside Accel and other existing investors.

With this new funding, Monzo aims to increase its reach, as well as bring in new features (like Savings Pots).

However, the bank is also introducing a crowdfunding aspect to this round, which will be announced later this year on Crowdcube.

The bank says it is seeing "incredible levels of customer engagement", with its Net Promoter Score at around 80, monthly active customer numbers of nearly 800,000 and more than 35,000 people on its community forum.

Recently, Monzo decided to switch off debit card top-ups for everyone.

Germany-based business bank **Penta** has raised €7 million in investment as its customer base grew 900% since the company's last €3 million fundraise eight months ago.

Penta says it has a "transparent, community-driven approach", as well as an active commitment to customer service, which has made it popular in the German business community since its launch in December 2017.

The funding will be used to drive Penta's hiring efforts and to build its marketplace offering. Based in Penta's Berlin HQ, the team now numbers 40 with plans to grow to 100 in the coming year.

Finn.ai, a Canada-based developer of artificial intelligence (AI) powered virtual assistant tech, has picked up CA$14 million ($11 million) in new funding.

The Series A round was led by Yaletown Partners and Flying Fish Partners, and featured participation from BDC Capital's Women in Technology Fund, 1843 Capital and angel investors.

As part of the investment, Eric Bukovinsky of Yaletown Partners and Frank Chang of Flying Fish Partners will join Finn.ai's board of directors.

The funding will support the company's growth in North America and Europe.

Finn.ai's chatbot solution supports payments, budgeting and savings, and has Canada's ATB Financial and BMO, and Nicaragua's Banpro among its clients.

Ethos, an ethical insurance company, has raised a Series B financing of $35 million led by venture capital firm Accel. The insurtech's total funding has now surpassed $46 million.

Additional participating investors include Google Ventures, previous investors Sequoia Capital and Arrive, a subsidiary of Roc Nation, and a debt facility from Silicon Valley Bank.

Ethos says it has seen revenue, customers and applications growing by more than 400% in just the past four months.

"The life insurance industry has had a product and reputation problem for a long time," says Nate Niparko, partner at Accel. "Ethos takes a technology-first approach to eliminate friction from the applications and claims process for its customers and has built a brand that people love and trust."

Through Ethos, most people can apply and qualify for a policy after a ten-minute application – versus the ten weeks it takes through a more traditional process.

"By applying data science and predictive analytics to determine an individual's life expectancy, more than 99% of Ethos customers have required no medical exam or blood test to get a policy", the firm says.

Vizolution, a customer experience tech provider based in Wales, UK, has secured £10 million in funding from its clients Santander, Royal Bank of Scotland (RBS), and HSBC.

Development Bank of Wales and several family offices and private investors have invested a minority in this funding round.

Vizolution's Software-as-a-Service (SaaS) based solution helps companies streamline complex customer journeys through remote channels.

The new funding will be invested in product development and sales growth.

"Last year, Vizolution technology enabled us to introduce the UK's first ever completely paperless mortgage process," says Ian McLaughlin, MD of home buying and ownership at RBS. "As well as facilitating mortgage loans of approximately £1 billion per month, Vizolution has helped us to unlock significant savings in our mortgage operational costs, including removing nearly seven million pieces of paper per year."

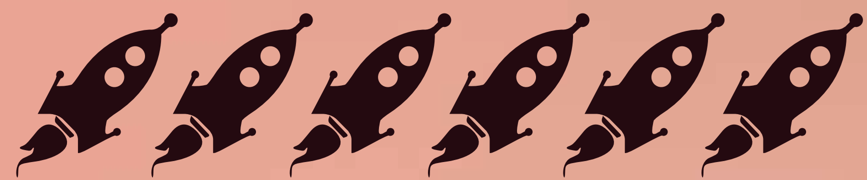
Wahed Invest, a New York-based digital investing platform, has raised $8 million from existing investors Cue Ball Capital and BECO Capital, with aims to accelerate development of a global savings solution and international expansion.

This brings its total funding to over $15 million since inception.

Wahed Invest claims to be the first Islamic fintech start-up to reach a valuation of $100 million.

It also says it brought the first halal digital investment advisor, allowing savers from all income brackets to invest in a globally diversified portfolio of ethically responsible stocks, sukuk and gold starting at $100.

According to the firm, its UK launch in August saw over 1,000 registered users in the first month, which was more than twice as fast as what it saw in the US. It is now eyeing the UAE, the wider GCC region and ASEAN markets.



INVioU, an Israel-based tech start-up, looks to "create new possibilities of factoring for small businesses by using blockchain technology" and is in the process of raising $2 million.

The company says it has already acquired $300,000.

INVioU's leadership includes chief executive Dror Shapira, the son of Israel's State Comptroller, Yosef Shapira; and chief product officer Yair Zehavi, who was a key figure in establishing the Israeli national savings exchange.

"Invoices cannot be counterfeited on the blockchain," the company explains, "as the information is encrypted and transparent to all permissioned parties."

The initial onboarding process, including the invoice history recording on the blockchain platform, credit scoring, and financing of the first invoice, the company claims, takes just one day. Recurring invoice financing is much faster, "significantly quicker than is customary in this field".

INVioU adds that its system is defined in full compliance with the European General Data Protection Regulation (GDPR).

It is already running in preliminary mode and will be active in early 2019. In Q2, a pilot version will be presented with partners.

$1.1m

Tez Financial Services, which describes itself as "the first fully digital non-bank microfinance company in Pakistan", has raised $1.1 million in a seed round led by Omidyar Network.

(Omidyar Network is an impact investment firm, established by eBay's founder, Pierre Omidyar.)

Other investors in this round include Accion Venture Lab (the seed-stage investment initiative of global non-profit Accion) and Planet N. Funds.

The new funds will be used by Tez to build its credit portfolio, enhance its mobile technology platform, and secure a licence.

"Our aim is to become the primary financial service provider for the unbanked and underbanked in Pakistan," says Nadeem Hussain, co-founder and CEO of Tez.

"Tez delivers a seamless experience for our customers, providing loans in under 15 minutes as opposed to the usual month timeline from local commercial banks. Soon, we will be able to process life and health insurance claims in a similar timeframe." For this, it partnered with two of the largest insurance companies in Pakistan, EFU Life and Jubilee General.

Tez has already integrated with EasyPaisa, UBL Omni, and SimSim as its branchless banking partners, resulting in the largest combined agent network.

VentureDive is Tez's technology partner.

MoneeMint, which aspires to be "the UK and Europe's first completely digital ethical bank" says it has secured "strategic funding" from Ground One Ventures, a UK-based private investment firm.

MoneeMint will target the underserved bankable communities across UK and Europe. Formerly known as Ummah Finance, it unveiled its new identity and brand in September this year.

"We are going back to the drawing board, looking at each and every aspect of a customer's current banking journey, the hardship they face and changing it fundamentally from the ground up – giving our customers the freshest banking experience", explains Hassan Waqar, co-founder of MoneeMint.

It claims it will deliver a "fundamentally different experience and feel around its product and services".

The investment will be used to fast-track the technology delivery roadmap. The bank hopes to open for business in Q1 2019.

UK-based **Zopa** is full of hope as it has closed its largest funding round to date, with £60 million for its banking plans from existing and new investors. The peer-to-peer (P2P) lender applied for a banking licence in 2016.

The firm says it achieved full year profitability in 2017 – for the first time since 2012.

Jaidev Janardana, Zopa CEO, says: "This new funding takes us a step closer to realising our vision of being the best place for money in the UK. Having served half a million customers to date, Zopa is set to redefine the finance industry once again through our next generation bank."

To date, Zopa has lent more than £3.7 billion in unsecured personal loans to customers in the UK.

Data insights and visualisation start-up **Quid** raised $37.5 million in a funding round led by REV Ventures (the investment arm of Lexis Nexis), which bumps Quid's total funding up to over $108 million. Also participating in the round were Julian Roberson, Henry Kravis, Lixil Group, Artis Ventures, Salesforce Ventures, and Peter Thiel's Founders Fund.

In addition to the investment, Quid also took out $8 million in debt; its valuation remains undisclosed.

REV Ventures' founding partner, Kevin Brown, commented to Bloomberg on the problem Quid is working to solve: "There's an explosion of unstructured data and no one knows how to handle it."

Among Quid's products is Opus, which enables users to upload their own data into Quid and receive an interactive, visual map to help interpret raw data from earnings reports, earnings call transcripts, customer feedback, or any other text-based dataset. Among its clients are Cisco, IBM, KPMG, UBS and Visa.

While powerful, Quid's software isn't cheap. The company, which brought in $28 million in sales over the past year, charges $25,000 per user per year.

In its largest round of funding to date, digital currency wallet **Coinbase** has closed a $300 million investment.

The Series E equity round, which brings the company's total funding to just over $525 million, was led by Tiger Global Management. Y Combinator Continuity, Wellington Management, Andreessen Horowitz, Polychain, and others also participated.

The company says it plans to use the funds "to accelerate the adoption of cryptocurrencies and digital assets".

The funding brought a spike in Coinbase's valuation – it is now worth $8 billion (from $1.6 billion in August 2017).

Coinbase has done a lot over the course of the year to earn its eightfold boost in valuation, including the launch of Coinbase Custody to help institutional investors store digital assets, acquisitions of Memo.AI and Earn.com, the launch of Coinbase Commerce, an e-money licence from the UK regulator FCA, the launch of its own venture fund, and the launch of institutional grade solutions for cryptocurrency trading.

Technology for the new world

Rajashekara V. Maiya, VP, Global Head of Business Consulting & Product Strategy, Infosys Finacle

In the ten years since the global financial crisis, financial regulators have tightened banking regulations.

Banks have increased spending on compliance and withdrawn from some markets.

Banks – once at the forefront of new technology and the testing of business models – have become more cautious.

Services, including business banking for companies of all sizes, have fallen behind customers' needs and technological developments such as real-time data analysis and distributed payment networks such as blockchain.

Fintech companies have disrupted retail banking and corporate banking.

They use technology to improve service, provide better returns of capital than traditional banks and reduce the overheads involved in providing a banking service (for example, bank branches, tens of thousands of employees).

Despite their efforts, many companies are still getting a mediocre banking service.

This is particularly true for SMEs, which contribute more than half of gross domestic product worldwide and more than half of our jobs. Yet many SMEs are completely ignored by banks, meaning that they're often forced to rely on family or friends for loans and other types of capital.

SMEs want the same digital experience for their banking that consumers get. They want real-time processing and liquidity management, digital self-service capabilities and innovative trade finance solutions.

If traditional banks don't provide these services, companies will switch to new companies that do.

How should banks respond?

AI, BLOCKCHAIN AND AUTOMATION

Technology could be part of the solution. Technologies including machine vision (enabling computers to see, identify and process images in the same way as human vision), artificial intelligence (AI) and blockchain (a decentralised, digital ledger that records transactions), can help corporate banks adapt to competition and new customer demands.


Rajashekhara V Maiya, Infosys Finacle

Banks are leading the use of blockchain – a collaborative platform that could benefit all banks using it.

Banks are using blockchain with automation technologies to process transactions quicker, save costs (for themselves and their SME customers) and improve data security.

STREAMLINING PAYMENTS

Much of the potential improvements will be in core banking services, for example in payments and cash management.

Today, about 40% of corporations originate payments in six or more currencies. Two in three (66%) of corporates use three or more banks.

Technology can help banks' business customers better manage their cash.

Santander UK bank recently launched an inter-bank cash management system for its corporate customers.

The service – in partnership with Finacle, part of EdgeVerve Systems, a subsidiary of Infosys – will give Santander's corporate customers access to a secure cash-management services, through any device.

In India, seven large banks have co-operated to create India Trade Connect, a blockchain-based trade network, for processing trade finance business transactions, including validation of ownership, certification of documents and payments.

ANALYTICS

Automating data and administrative tasks is only part of the solution, though.

Banks also use data to understand their customers. Analytics technology can help them do this. Again, though, there is room for improvement in how banks are using the technology.

Many banks are using analytics but usually only after a transaction has happened – for example, after a customer has left a bank branch.

Fintech companies are trying to liberate analytics technology by enabling it to be used online in near real time, such as when a customer is doing some banking on an app, or checking how quickly a transaction is clearing.

Banks can make better use of this customer data by using open-source such technology, such as Hadoop, which enables customers to process and analyse large amounts of data.

Corporate banking is going through its most exciting time for at least 30 years.

Fintechs are disrupting the market and competing with traditional banks.

Companies have more choice than ever for their business banking.

The changes could be good news for traditional banks – if they respond wisely.

By using blockchain, automation and machine vision technologies, corporate banks can modernise their IT, respond to challenges from fintechs, improve service for SMEs, reduce back-office costs and spot gaps in the market.

Business as usual is no longer an option. You can bank on that. **bt**

Regulation and competition driving lending transformation

Robert H. Kahn, managing director, global banking, Automated Financial Systems, Inc. (AFS®) talks about the impact of regulatory change as a driver for core credit and lending transformation.

With constantly evolving regulatory requirements, how does AFS stay at the forefront of the evolving global regulatory environment?

AFS has always had one focus, delivering quality industry-leading credit and lending solutions. We are immersed in the industry, allowing us to stay at the forefront of all regulatory and accounting changes.

AFS monitors and meets frequently with regulatory agencies and experts as well as speaks at and attends regulatory conferences to anticipate current concerns and future requirements. Lately we have heard talk around IFRS9, operational resilience, progress towards a European banking union, and BCBS 239 compliance. AFS was fortunate to be invited by the BCBS 239 Working Group to provide our informed perspective of what changes would be necessary to promote compliance. Intelligence from all these activities is analysed to form our product roadmap and allows AFS to architect our solutions to address evolving global regulatory requirements well in advance of the required effective date.

As a leader in the area of credit and lending, can you share your insights on what is necessary to achieve the required data for regulatory compliance while better managing loan portfolios?

To be compliant while competing in this historic low interest rate environment, "business as usual" is no longer sufficient. Credit/lending transformation is a critical component for most European banks, due to outdated legacy systems. These platforms cannot provide the accurate, accessible data required to respond to fast-changing business needs and regulatory mandates (IFRS 9, AnaCredit, a common EU definition of default etc.). There is a real necessity to replace these "patchwork" systems with a fully integrated, straight-through processing (STP) solution.

It is clear that the separation between "regulatory" and "business" processes, decisions and risk strategies is no longer viable. Banks require a cohesive transformational approach combined with a focused implementation strategy of new technologies for increasingly digital bank ecosystems that provide both the bank and its clients new options for optimising the business relationship. The "ideal credit and lending process" depicted here combines these into one seamless solution providing the required data integrity, revenue enhancement, and increased efficiency, while also lowering operating costs and enabling a faster time to decision and funding.

How does AFS address concerns around project implementation risk and regulatory impact from problematic implementations?

Successful project implementation is one element of demonstrating operational resilience, which is top of mind among European regulators. Resilience is also defined by technology solutions that are architected with industrial strength and 24/7/365 operability.

With the experience of hundreds of system conversions AFS uses four key elements for successful implementations:

1) a disciplined project implementation methodology;

2) precise project planning, organisation, and management;

3) active client-side executive sponsorship and engagement throughout the project; and

4) minimising customisations to the system.

A year ago, **we delivered a major implementation to a client over a two-day weekend** that impacted 100 business applications, 130 interfaces, 1,489 data fields, and 4,536 business processes – on time and on budget – with no issues during the project or since. This success was due to using our key elements of implementation, and a robust discovery exercise that defined the desired target state to set expectations and identify important dependencies.

Our level of planning and execution coupled with solution architectural excellence provides successful implementations and a level of system availability that delivers operational resilience. AFSVision® has the agility, scalability, and built-in functionality to meet the banks' requirements "as is". Following the key elements of success, a tested methodology, and delivering a solution that does not need customisations means taking risk out of implementation.

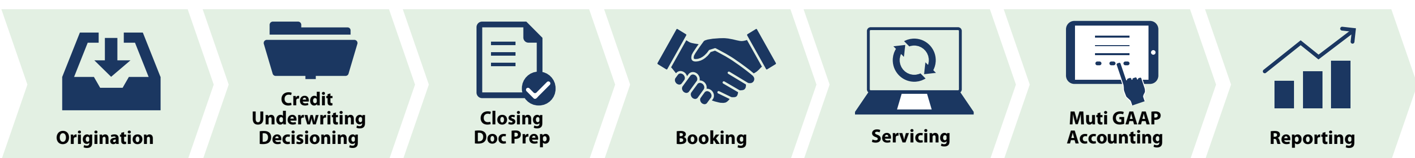
Can banks achieve current and future regulatory compliance with solutions that provide a competitive market advantage?

Absolutely, as long as banks are prepared to meet the challenge of transformation, adopting a solution with real-time technology that provides quality, accurate information with efficiency and straight-through processing. Strategic transformation must be built for the future and address real-time management of accurate and complete data that meets current and future regulatory drivers and business goals – with no customer disruption. Regulatory and business requirements need to be assimilated into a single, digitally enabled, STP as depicted in this article's diagram.

AFSVision was built to minimise risk and is designed with the agility and built-in functionality to meet any bank's requirements, while integrating, as needed, to any bank system for STP lending. AFSVision provides the foundation for accurate and reliable reporting, data quality, and controls to obtain "one version of the truth" necessary to achieve regulatory compliance and maintain a competitive advantage in the marketplace.

The key to success is a solution that provides effective data management to position banks for current and future regulatory mandates while achieving their business objectives around revenue growth, client experience, scalability, enhanced risk management, data quality and operating efficiency. **bt**

IDEAL CREDIT AND LENDING PROCESS



A fully integrated, STP credit and lending platform, that can integrate to any bank system at any point along the lending lifecycle, ensures access to accurate, and complete data crucial not only for regulatory reporting and risk mitigation, but for making informed business decisions.

COMMENT

The age of the generalist is now

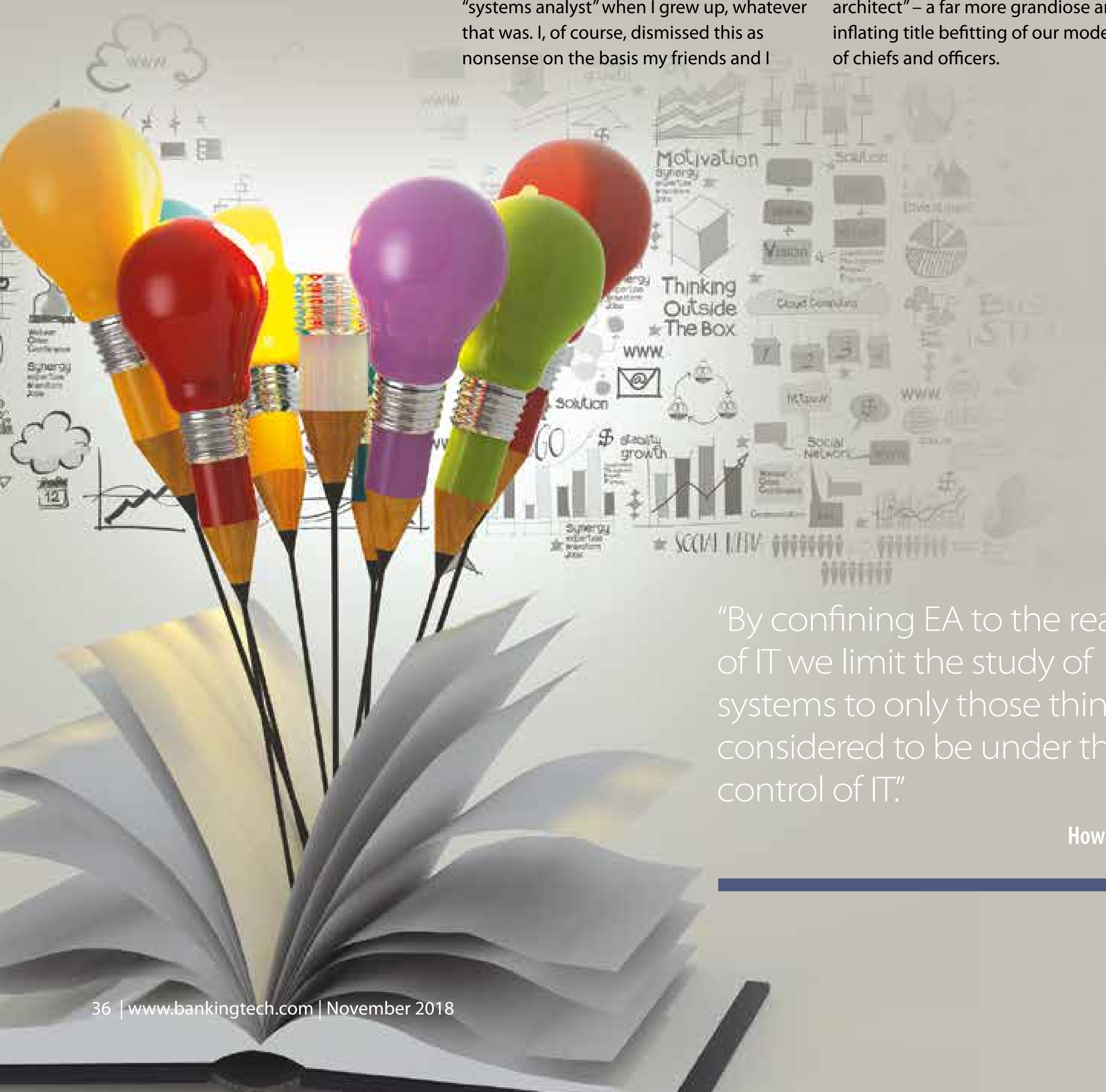
By *Howard Crisp*

I have vague recollections of taking some kind of careers advice test in my later years at school. You know the sort of thing – multiple choice – questions evolving based on your responses – probably whilst sitting in front of an Acorn Electron (google it) or other ubiquitous 1980s school computing device.

It concluded I was going to be a "systems analyst" when I grew up, whatever that was. I, of course, dismissed this as nonsense on the basis my friends and I were clearly future rock stars about to move to L.A. – why their software couldn't work that out wasn't my problem.

Well, no prizes for guessing who was right.

The terminology might have changed over the years but I'm pretty sure that the 2018 equivalent would be an "enterprise architect" – a far more grandiose and ego inflating title befitting of our modern era of chiefs and officers.



"By confining EA to the realms of IT we limit the study of systems to only those things considered to be under the control of IT."

Howard Crisp

Something that hasn't changed though is a tendency to only see technology based things and their interactions as "systems". We typically constrain the application of enterprise architecture (EA) as a result and ask no more of it than the ability to produce vast spiders webs of relationships between the boxes in the data centre.

Systems are everywhere. I hold one in my hand right now, they fly past my train window, they exist through the process by which you manually update the to-do list hanging in your kitchen at home.

The scientist James Lovelock, sadly no longer with us, wrote extensively on the environment as a whole being a vastly complex system of inputs and outputs. This was in sharp contrast to the prevailing thinking of the day which saw weather, people, animals, factory chimneys and the like as existing in relative independence from each other, occasionally crossing paths on the same lump of rock spinning through space.

During the 1960s Lovelock was approached by NASA to help them design instruments for use by landing modules to detect life on Mars. He was initially asked to develop devices to perform soil analysis, but realised that the answers were already staring us in the face without needing to put a single foot on the red planet. Infra-red astronomy had already revealed the chemical composition of its atmosphere.

Lovelock concluded that any planet hosting life would contain an atmosphere in a constant state of chemical disequilibrium as a result of the interactions taking place. Mars, of course, had nothing of the sort, and existed in a state of near perfect equilibrium. His genius was to be able to see EVERYTHING as a system and avoid the specialisation trap that encourages very close scrutiny of only one part at a time. What he saw when he looked at both Mars and Earth was not planets littered with things but fantastically complex systems albeit with radical differences in how frequently they changed state. Lovelock, first and foremost, was a generalist.

"Given the variety and complexity of systems (remember – technology, human and environmental alike) that exist inside a large, mature organisation such as a bank, the challenge of discovering and representing their form and function in a sufficiently general way for their interactions to emerge as visible systems is huge."

Howard Crisp

OK, now back to the enterprise (cue transporter and tricorder jokes).

By confining EA to the realms of IT we limit the study of systems to only those things considered to be under the control of IT. We build models of instruments used for soil analysis but forget about the atmosphere the soil is lying under and the people daily treading it underfoot.

To make matters worse, the vast array of different software and hardware systems that typically co-exist within a large organisation today encourages ever increasing specialisation of expertise and accountability. Tunnel vision is everywhere. It is near impossible for a single person to achieve even basic engineering competency across such a diverse landscape, so we carve the country up and create borders – both physical and political – some serving a useful purpose whilst others remain mystifying for decades, millions of lines of code bundled up and handed over to the unlikeliest of guardians.

That specialisation brings isolated groups closer to the secrets in the soil but at the loss of any useful understanding of those much bigger systems of which it forms part.

Given the variety and complexity of systems (remember – technology, human and environmental alike) that exist inside a large, mature organisation such as a bank, the challenge of discovering and representing their form and function in a sufficiently general way for their interactions to emerge as visible systems is huge. It requires us to develop yet more languages and descriptive techniques on top of an already bloated information superstructure, overflowing with documents and data of uncertain provenance.

But the work must be done.

Summer is long gone. But its high heat baked the soil.

The crop wasn't left in the field forever, else when the rains did eventually come, we could have lost everything.

The age of the generalist is now. **b**t

Howard is a 20 year plus veteran of a major global financial institution and has during that time developed and supported numerous systems in the commercial and corporate banking space. Views expressed are his own.

Odeabank

For branches, AV technology is money in the bank

Banks around the world are investing in advanced audiovisual technologies to improve customer engagement and reduce overhead. *Brad Grimes*, senior director of communications at Avixa, explores who's done what and the results.

Modern consumers have more brands and digital activities vying for their attention than ever before. They face a constant barrage of advertisements and social media updates on their mobile devices, resulting in more time spent looking at their screens. Banks have largely adapted, introducing mobile apps for conducting basic transactions, and they are now using digital technology to transform the branch experience and create inviting, purpose-built spaces where customer relationships can be nurtured.

In short, banks have the opportunity to capitalise on the effectiveness of audiovisual (AV) technologies to increase information retention and cross-selling, improve customer relations, reduce visitor frustration, and even improve operational efficiency by reducing real estate and workforce needs.

DOING MORE WITH LESS

Citizens Bank of Rhode Island, a large US retail bank with more than 1,200 branch locations and $5 billion in revenue, offers an example of how banks can adapt to changing consumer habits. In 2018, the bank began a multi-year overhaul that will see many branches shrink their footprint by up to 50%. As part of the project, Citizens Bank is working with AT&T and Cineplex Digital Media Group to outfit all of its branches with new digital signage displays and media players that help maximise customer messaging, improve cross-selling, and engender a community-centre aesthetic by showcasing content customised to the local customer base.

Bruce Van Saun, chairman and CEO of Citizens Financial Group, says the company-wide initiative includes redesigning many branches to have smaller footprints, with less space dedicated to transactions and more space for private rooms and conversation.

Although some banks have closed branches for financial reasons, Citizens Bank's strategy represents a different approach with potential benefits, namely that customers can still have the face-to-face interactions they need, but improved utilisation of space and technology can lower costs and boost cross-selling opportunities.

"There's a little bit of pruning of the number of locations," Van Saun says, "but the greater element of the programme is trying to take 4,200-square-foot branches and turn them into 2,500 or 2,200-square-foot branches. By 2021 we will have gone through 50% of the branches as the target."

> "The greater element of the programme is trying to take 4,200-square-foot branches and turn them into 2,500 or 2,200-square-foot branches."
>
> **Bruce Van Saun, Citizens Financial Group**


Odeabank


Citizens Bank

The digital signage displays currently feature topics such as planning for retirement, managing student loans, and community-based activities, while also providing stock indices and local weather and news. According to AT&T, the result is a richer customer experience through next-generation features and new design concepts.

A digital signage display can present far more information than a static advertisement, while using the same amount of physical space. Digital signage offers the ability to present multiple slides, scroll text, switch among promotional subject, and attract attention through changing images or video. In fact, a recent study by Capital Networks found that although static signage impressions drop off dramatically after the first day, digital signage retains a consistent engagement level. In response, banks have begun using adaptive and interactive AV technologies to engage customers and entice non-customers to see what the bank offers.

CREATING AN INTERACTIVE STOREFRONT

Odeabank entered the Turkish market with a splash of colour and outward-facing technology rarely seen in retail bank branches. In Istanbul, the bank's flagship branch features unique curved architecture and an artful exterior, while the interior utilises a range of AV technologies including large touchscreen tables, tablets, interactive screens, digital signage, room-wide overhead LED tickers, and sophisticated customer tracking that targets its marketing based on visitors' gender and age.

I-AM, the firm responsible for the flagship store's architecture and interior design, set out to provide the most efficient and rewarding customer experience, using popular consumer technologies to put guests at ease and provide improved engagement.

Large-scale touchscreen displays in the 24×7 self-service lobby provide interactive applications that allow customers to get loan estimates and information about new products and options, while tabletop touchscreen displays inside the bank can entertain and inform customers. The bright, vibrant design creates excitement, and the constant motion from the digital displays adds to the bank's energetic environment.

Like Citizens Bank, Odeabank has created more open space and designed its layout to promote customer conversations, while directing common, everyday transactions to ATMs or ITMs (interactive teller machines). The layout gives its digital signage and interactive displays greater reach, as customers move more freely through the branch's open spaces and spend less time restricted to teller lines and desk pools. >>

Bank of America, San Francisco

A TOP-TO-BOTTOM VIDEOCONFERENCING EXPERIENCE

For many banks, AV technology upgrades have pervaded the entire corporate environment, bringing new solutions to every level of the company's operations. Videoconferencing plays a vital role in the daily operations of many corporate offices, reducing travel time and costs, expediting conversations, and helping increase efficiency while also providing more human-centred, face-to-face interaction.

Bank of America has put this AV technology directly in the hands of consumers through its new Advanced Centre, available at select locations. The concept is an employee-free branch featuring an ATM lobby, digital concierge, and private rooms equipped with on-demand videoconferencing systems.

The digital concierge automatically detects a customer's arrival and instantly connects them to a bank employee located at a call centre for addressing basic banking needs. This provides customers with fast service and a personal feel while using very little floor space.

The private rooms offer videoconferencing with local and national experts to discuss auto loans, mortgages, retirement, and more. With more than 300 Advanced Centre locations currently planned, it is poised to become an important part of the bank's retail presence.

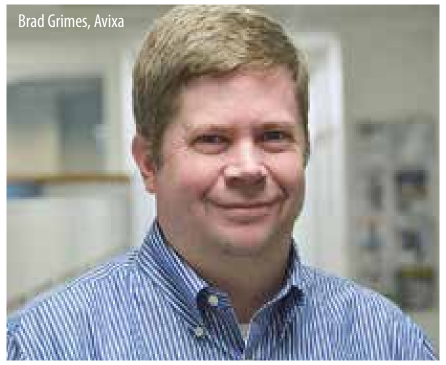
DOMINATING THE CONVERSATION

Still other banks are reaching for the "wow" factor using AV technology. Customers entering Bank of Hawaii's flagship "Branch of Tomorrow" in Honolulu are greeted with a stunning 10-metre by 2.2-metre LED video wall with a 3mm pixel pitch that results in HD-resolution imagery – the type of technology usually found in stadiums, airports and along major roadways. The video wall, installed by Ford AV, creates a unique experience in the main lobby, displaying captivating Hawaiian scenes interspersed with bank promotions and other marketing campaigns.

Bank of Hawaii is actively advertising its AV technology leadership. On the bank's website, the company proudly states that its Branch of Tomorrow "offers a 21st-century banking experience – including easy deposit ATMs, wi-fi, tablets, digital screens and a team of financial specialists – to support greater convenience and create personal interactions".

Digital displays are becoming more ingrained in the everyday lives of nearly every consumer, creating a need for banks to be more proactive in their customer relations and outreach. Increasingly, banking institutions are demonstrating how interactive and multimedia display technologies can enhance the customer experience and revive the sense of community long associated with local bank branches.

Whether the goal is to increase cross-selling, improve the effectiveness of in-branch advertisements, provide information that raises dwell time or reduces visitor frustration, or more efficiently utilise space and workforce, today's rapidly advancing AV technologies are proving to be the solution. **bt**


Brad Grimes, Avixa

"For many banks, AV technology upgrades have pervaded the entire corporate environment, bringing new solutions to every level of the company's operations."

Brad Grimes, Avixa

Audiovisual and Integrated Experience Association (Avixa) represents the $178 billion global commercial AV industry.

IHS Markit

Cloud adoption: the key to agile change

Agility is top of mind among the key players in today's post-trade market. But what does agility actually mean in practice? *Paul Fox*, Managing Director at IHS Markit, explains how financial services firms are developing people with the skills needed to change and innovate faster, cheaper and more effectively from year to year. Many firms are adopting agile approaches to business transformation and new product development.

"One of the big trends enabling such agility is cloud adoption," Fox says. "Traditionally, infrastructure change within a financial institution has been costly and time-consuming, which has often slowed progress on critical change programmes. But the growth of cloud computing has changed all of that."

Historically, issues over security and data confidentiality were significant barriers to cloud adoption. Today, things have changed and the cloud can provide the highest levels of security and availability, he says. These capabilities are becoming widely accessible with a compelling cost/value proposition. "Banks are moving both their infrastructure and apps to the cloud and the vendor is managing it all for them seamlessly," says Fox.

"The speed factor is one of the most attractive elements to this model," he says. "During agile change programmes, infrastructure requirements can be unclear and emerge at short notice. When banks need to commission infrastructure or add additional capacity it can be a lengthy and expensive process."

Using the cloud accelerates the timeframe from a factor of months to hours, enabling quicker innovation and greater responsiveness to fast-paced change. In addition, the protections that banks had in place with their own systems are arguably higher and more reliable within a cloud environment. "Today, there's no tangible reason not to move to the cloud," he says.

"Financial institutions are seeking to innovate, to reduce legacy system costs and to lower infrastructure risk. The cloud can address all of these areas.

"Today, there's no tangible reason not to move to the cloud."

Paul Fox, IHS Markit

Firms can move to the cloud at a fraction of the cost incurred by maintaining legacy systems and with the surety that it is tried and tested. The support and migration experience is in place for them," he says.

Regulation, he says, has not been a direct driver of cloud adoption, but indirectly banks have needed to be responsive to a wave of regulatory change over recent years. Cloud-based solutions have proven valuable through shorter onboarding cycles and faster time to production.

But, he adds, that moving both infrastructure and apps to the cloud in a vendor-managed model works only if the right people are available to manage each stage of the process. "The vendors need the ability to support the network, the storage, the operating system, the security, the connectivity and finally the app," he says. Vendors, like IHS Markit, that have proven experience of managing this entire process and are able to offer their services in a cost-effective way are likely to win out, Fox believes. **bt**

Movers and shakers

Emma Leith has joined **Santander UK** as chief information security officer (CISO). She moved from Barclays International where she had a brief eight-month stint as director of cyber strategy and programme.

Leith has over 13 years' experience in cybersecurity in financial services, oil and gas, telecoms and government sectors. Prior to Barclays, she spent seven years at BP, the last three as head of cybersecurity and IT across risk, corporate business and functions.

Banking software vendor **Avaloq** has named **Michael Pahlke** as chief service delivery officer (CSDO) and **Martin Greweldinger** as chief product officer (CPO).

Pahlke joins from Credit Suisse, where he worked for over 16 years and led a number of solution delivery units in technology and operations as MD for different divisions.

Brian Hurdis, who was interim CSDO, will remain "closely connected" to Avaloq in a consulting role, the company says.

Greweldinger will start his tenure on 1 January 2019, joining from Boston Consulting Group (BCG), where he is a principal and member of the financial institutions and technology advantage practice areas. Prior to that, he worked at various banks for over 15 years, including Commerzbank, Credit Suisse and Dresdner Bank.

BNY Mellon has made a spate of senior tech leadership appointments.

Bhargavi Nuvvula will lead the bank's corporate technology organisation and will be based in Pune, India. This role previously sat in the US.

Nuvvula joins from American Express India, where she was head of technology. "Good-naturedly known as the 'chief disrupter', Nuvvula has infused her and her teams' work with positive turbulence and product thinking in creating a track record of innovation and transformation," BNY Mellon says.

Sabet Elias is BNY Mellon's new CTO. Based in New York, he moves from Bank of America, where he was sales and trading CTO for global banking and markets, "with a solid track record of building platforms". Previously, he was CTO and global head of electronic trading infrastructure at Citigroup, and CTO at Lehman Brothers.

Avi Shua has been appointed as the bank's technology lead for wealth management. He joins from Goldman Sachs, where he had a 25-year career across various roles, most recently as global head of private wealth management technology. In 2008, he became the first CIO of the newly formed Goldman Sachs Bank USA.

Swift has appointed **Julien Blanchez** as its head of data analytics, a newly created role.

"Blanchez will be tasked with enhancing Swift's use of data to provide greater value for the community, ensuring customers are able to harness data to improve and develop their products and services and leveraging data to improve Swift's own product development," the company explains.

Blanchez moves from Google, where he worked as a global security and compliance strategist for a decade, in the US and Europe. He also worked for SAP, Barco and Boston Consulting Group (BCG).

Data aggregation and analytics company **Envestnet | Yodlee** has recruited **Sebastien Taveau** as its VP of developer experience.

Taveau is charged with overseeing the new developer experience, positioning the company as a developer-first platform, and strengthening ties with the fintech developer community.

Taveau has 20+ years of experience. His previous roles include chief developer evangelist at Mastercard, chief technologist at Zelle/Early Warning Services, CTO for Validity, and principal/astronomer at PayPal. **bt**

EVENTS CALENDAR

December

1: Regulation of Cryptocurrencies, London
cityandfinancial.com

3-5 RegTech Rising, London
finance.knect365.com/regtech-rising

3-5: Future Branches, Austin
futurebranches.wbresearch.com

3-7: RiskMinds International, Amsterdam
finance.knect365.com/riskminds-international

5-6: FinTech Connect, London
www.fintechconnect.com

13: Banking Technology Awards, London
bankingtech.com/awards

January 2019

28-30: Intelligent Automation for BFSI, New York
intelligentautomationbfsi.iqpc.com

February 2019

12-14: FinovateEurope, London
finance.knect365.com/finovateeurope

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Tel: +44 (0) 207 017 5379
Email: irena.andrisevic@knect365.com

Out of office

Transport for London ruins our day with fintech start-up launch

It's hard to imagine life in the UK's capital getting any worse but Transport for London (TfL) has heaped more misery on the population by entering our fintech space in suitably mediocre fashion.

Not content with running a train system in the worst possible manner, striking constantly, and generally behaving like prats – TfL has launched its own start-up, called Total Failures Limited. It "promises" (yeah, right) to "shake up the payments space". Ruin it more like.

The media were invited to the official launch at a crappy hotel in central London. You probably know the type – pompous staff; an establishment living off former glories; and a place that was last cleaned properly during the reign of Queen Victoria.

As is quite common with media invites in fintech, the details in the email were slightly wrong. Just enough mistakes to sow seeds of doubts in the minds of journalists trying to find the place. The postcode, street, and spelling of the hotel name had various sloppy mistakes. Researching a story is fine, but it doesn't need to extend to every single activity in this industry.

Harold Altarbuyer, senior reporter at the fortnightly and rather forthright Just Gimme the Fintech Freebies and Get Outta My Face, describes the launch: "Just getting to the event was a drama – aka a normal day in this wonderful city. The journey is meant to be 30 minutes. I factored in two hours in case of any problems. The Piccadilly Line was hellish as usual and slower than the thought processes of a P.E. teacher.

"At one point the train stopped in-between stations. The lights went off and we were stuck in darkness for ten minutes like some pathetic ghost train ride at a funfair.

"After leaving the station, finding the street, wading through piles of litter, dodging discarded syringes, and stepping over the blood-soaked corpses of two stab victims; I finally located the ironically named Hotel Halcyon.

"TfL had put security guards on the door. Naturally they were unhelpful, deliberately slow and had an attitude problem. Next, I met hotel reception, who… wait for it… also had an attitude problem. Finally, I got to the conference room where TfL staff were on hand to 'welcome' the media. You're one step ahead of me… they too had an attitude problem. As with 75% of these events, my name wasn't on the list of journalists. You invited me you cretins."

> "Just getting to the event was a drama – aka a normal day in this wonderful city."
>
> Harold Altarbuyer,
> Just Gimme the Fintech Freebies and Get Outta My Face

With Altarbuyer lost in an epic rant it was over to another journalist who had arrived on time. And for those who were late. Wow! What planet are you on? You've lived in London long enough. You must know how unreliable everything is. Jeez. Get a life. Or at least an alarm clock.

Davinia Dragonsdirge, editor at the rock music-loving Fintech Bloody Fintech, "I want everyone reading this on their seats. Put your hands together and let's rock! Yeah, well the launch was kinda lame and uncool. Some scruffy TfL worker appeared on stage – late obviously. His laptop for the PowerPoint presentation didn't work. In his awful nasally accent he said that always happens. Perhaps a smart idea would be to get it fixed so it doesn't happen again.

"Myself and the other journalists thought the firm itself wasn't such a bad idea. Nothing special but OK. TfL told us the company improves the Oyster app and offers the usual benefits in the payments space. The app didn't work at the demo – so we'll have to trust TfL's word. Have they ever let us down before?"

It's a reasonable question from Dragonsdirge to end on. Over to you TfL and Total Failures Limited – show us what you've got! **bt**

Antony Peyton