

RETAIL BANKER

INTERNATIONAL

THE NEW NORTH FACE



LLOYDS' FLAGSHIP LOOKS TO BLEND WITH MANCHESTER'S CAFE CULTURE

DISTRIBUTION

US banks have reduced branch numbers, but scope for more closures remains

PRODUCTS

Using social media to attract students as campus-based branches dwindle

INDUSTRY INSIGHT

Technology and its role in driving the three main consumer desires

THIS MONTH

COVER STORY

LLOYDS' FLAGSHIP IN MANCHESTER



10

Editor: Douglas Blakey
+44 (0)20 7406 6523
douglas.blakey@verdict.co.uk

Senior Reporter:
Patrick Brunsanahan
+44 (0)20 7406 6526
patrick.brunsanahan@verdict.co.uk

Junior Reporter: Briony Richter
+44 (0)20 7406 6701
briony.richter@verdict.co.uk

Group Editorial Director:
Ana Gyorkos
+44 (0)20 7406 6707
ana.gyorkos@globaldata.com

Sub-editor: Nick Midgley
+44 (0)161 359 5829
nick.midgley@uk.timetric.com

Publishing Assistant:
Joe Pickard
+44 (0)20 7406 6592
joe.pickard@verdict.co.uk

Head of Subscriptions:
Alex Aubrey
+44 (0)20 3096 2603
alex.aubrey@verdict.co.uk

Director of Events: Ray Giddings
+44 (0)20 3096 2585
ray.giddings@compelo.com

Customer Services: +44 (0)20 3096 2603 or +44 (0)20 3096 2636, briefings@verdict.co.uk

Financial News Publishing, 2012. Registered in the UK No 6931627. ISSN 0956-5558
Unauthorised photocopying is illegal. The contents of this publication, either in whole or part, may not be reproduced, stored in a data retrieval system or transmitted by any form or means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publishers.

For more information on Verdict, visit our website at www.verdict.co.uk.
As a subscriber you are automatically entitled to online access to Retail Banker International.
For more information, please telephone +44 (0)20 7406 6536 or email briefings@verdict.co.uk.

London Office: 71-73 Carter Lane, London, EC4V 5EQ

Asia Office: 1 Finlayson Green, #09-01, Singapore 049246

Tel: +65 6383 4688, Fax: +65 6383 5433 Email: asiapacific@sg.timetric.com

RETAIL BANKER
INTERNATIONAL

VERDICT



NEWS

05 / EDITOR'S LETTER

16 / ANALYSIS

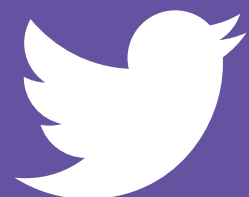
- Diebold Nixdorf IMS: No more in-branch ATMs?
- TD claims Canadian fintech first
- Temenos bags major deal from Openbank
- Mortgage costs for new home buyers to rise in 2018 and 2019: Scotiabank
- OCBC and StarHub agree Singapore's first bank-telco strategic partnership
- IPPB ramps up growth plans

19 / DIGEST

- Bank Audi deploys NCR SelfServ 80 Series ATM solutions
- NCR: UK consumers expect more
- Atom closes in on £1bn in deposits
- Taiwan's O-Bank goes digital with Avaya



18



FOLLOW RBI ON TWITTER
@RETAILBANKER

OCTOBER 2017



INDUSTRY INSIGHT

06 / TRUSTEUAFFAIRS

A new report opens a door to the potential development of any type of European regulation on AI, including in financial services, where algorithms are widely used and have wide effects, writes **Monica Monaco**

21 / TCS SCOTLAND

We have three main desires from banking and financial services: any-time transactions, tailored services and assurance of security. Technology has been key to delivering these, writes **Gopalan Rajagopalan**

22 / SALESFORCE

The breadth of services that traditional banks can offer consumers, in contrast to fintechs' largely single-service offerings, will be their golden ticket to customer retention and loyalty, according to Salesforce's **Gavin Mee**



DISTRIBUTION

07 / US BRANCHES

Wells Fargo, Chase, Bank of America, Regions, PNC and Capital One have all reduced their networks by at least 100 branches in the year to end June 2017, reports **Douglas Blakey**. By international standards, however, the US remains overbranched, and there remains scope for further large-scale closures

10 / LLOYDS

Most people enter a branch to complete a transaction, not to order a coffee. However, at Lloyds' new 'super branch' you can do both. In a time where branches are closing faster than ever, will this be the concept to save the physical channel? **Patrick Brusnahan** writes

PRODUCTS

11 / UNSECURED LENDING

UK consumers' unsecured debt has reached an all-time high of £300bn, or £11,000 per household. It is growing at a faster rate than at any time in the past 15 years, and is now an eye-watering 30% higher than prior to the financial crisis, writes **Douglas Blakey**

12 / STUDENT ACCOUNTS

From competitive overdraft rates to travel discounts and gift vouchers, the major UK banks have a range of incentives to tempt school leavers. But as campus-based branches become increasingly rare, the marketing battleground is increasingly fought on social media, reports **Briony Richter**

STRATEGY

14 / FINTECH

If the UK is to become the number one fintech destination, it needs a single policy vision, co-ordinated open standards, enhanced regional engagement with support for talent, and greater access to capital, according to **Douglas Blakey**

15 / CTBC BANK

Taiwan's CTBC Bank picked up three awards at the fourth annual CEPI Summit in Singapore hosted by RBI's sister title Cards International. Senior VP Amy Lim talks tech strategy and the local banking landscape with **Anna Milne**

ANALYSIS

20 / DIVERSITY AND INCLUSION

Canadian employers overwhelmingly agree on the benefits of a diverse and inclusive workplace, but only a small minority take advantage, according to a new report. **Douglas Blakey** writes

Retail Banking: Europe 2017
15th November 2017 • Amsterdam

Navigating the Transformation of Retail Banking in Europe

Top industry movers and shakers will meet to debate the importance of new strategies, business practices and partnerships in the industry. We invite you to become an active voice in this discussion to shape the future of retail banking.

Key Issues

- Innovation in banking – Evaluating new technologies changing the face of retail banking
- Succeeding in a digital economy - Catering to the changing customer mindset, behaviour and expectations
- Big data and the power of analytics - Utilising advanced data modelling
- Ensuring safety and security in a digital world: Digital identity, cyber security and fraud management
- Collaboration instead of competition: Highlighting the need for synergies between FinTech and banks

Why Attend

- Hear from leading retail banks as they discuss digital disruptions, technology innovations and new generation of customers
- Join expert panel discussions that offer insight into some of the most pressing issues impacting the retail banking sector in Europe
- Examine key industry trends in a day packed with keynotes, case studies and interactive debates
- Take part in thought-provoking discussions covering the most critical industry issues using out new technology tool Slido
- Earn CPD points towards your professional development and take away key findings from the day

Headline Sponsor



Silver Sponsors



Brand Sponsors



Exhibitor



In association with



For more details please contact
Ray Giddings on ray.giddings@compelo.com or call +44 (0) 20 3096 2585

MUFG AND DEUTSCHE BANK RAMP UP AI AMBITIONS



Douglas Blakey, Editor

Thirty percent is becoming something of a benchmark for the potential offered by artificial intelligence (AI).

In September, Vikram Pandit told Bloomberg that developments in technology could see about 30% of banking jobs disappear in the next five years. Now Japan's Mitsubishi UFJ (MUFG) is getting in on the act.

MUFG plans to automate 30% of its operations by 2014 by using robots and AI for paperwork that currently deploys 9,500 employees to process.

Branch staff spend around half of their time processing documents, so the argument goes. Optimising the potential offered by AI means that staff will have more time to better serve the mass affluent and private banking customers.

Where MUFG and Pandit part company is the likely effect on headcount. Pandit argues that AI offers the potential for reduced headcount, especially in the back office. MUFG, meantime, argues that it has no excess headcount and there will not be a direct correlation between greater use of AI and employee numbers.

While the back office is the most regularly quoted example of the potential offered by AI, benefits extend to a number of areas such as product delivery, marketing, compliance and customer experience.

There is at least a growing consensus regarding the potential benefits offered by AI. Reduced costs, increased revenue, greater fraud detection, an improved customer experience and greater customer engagement are the usual compelling examples given of its benefits.

Recent AI banking announcements include:

- **BNP Paribas:** In October, BNP said it was using AI for a new trade matching tool, and said it would be compliant with MiFIDII.
- **Deutsche Bank:** In October, Deutsche completed internal testing of an IBM Watson AI cognitive system. This offers a scalable and personalised advisory model supporting customers and bank employees in over 120,000 annual internal and external processes.
- **HSBC:** In August, HSBC said it was working with IBM to develop a cognitive intelligence solution combining

optical character recognition with advanced robotics to make global trade safer and more efficient for thousands of businesses.

On the writer's travels attending and speaking at banking conferences around the world, one of the most repeated self-criticisms by bankers is their failure to manage data efficiently and profitably.

They know they are sitting on tons of customer data, but monetising that data has been a challenge. The potential offered by machine learning, AI and advanced analytics is hugely exciting.

Perhaps one of the biggest AI myths that needs to be dispelled is that AI is something new. Banks have been using forms of AI for years, in particular in processing.

The best presentation at any event I have attended this year remains one from Alan McIntyre, senior MD at Accenture. He summed it up perfectly when he said the next stage of AI in banking will be toward simple and smarter interfaces: drawing on machine learning that adapts to data and interactions to improve areas like fraud detection, and tapping AI-enabled tools – like centralised platforms/assistants or messaging bots – to better converse with and offer services to customers in the front office.

"Relying on AI for some internal and external interactions will help elevate the customer experience and move staff to more judgment-based and higher-value -added roles," McIntyre predicted.

As *RBI* went to press, former Barclays CEO Antony Jenkins claimed in a presentation he gave in London that big banks have "no advantage over fintech startups when it comes to AI".

I respectfully disagree with Jenkins. The major banks have a number of considerable advantages over the startups. Within three to five years the major retail banks are likely to deploy AI as their main way of engaging with customers.

They have deep pockets. They will accomplish their ambitions just as well or better than startups such as the one fronted by Jenkins. ■

GET IN TOUCH WITH THE EDITOR AT: DOUGLAS.BLAKEY@VERDICT.CO.UK

COMMENT:

AI, ROBOTICS AND EU REGULATION

A new report opens a door to the potential development of any type of European regulation on artificial intelligence (AI), including in financial services, where algorithms are widely used and have wide effects, writes **Monica Monaco**, founder and MD at TrustEuAffairs

In January 2015, the JURI Committee of the European Parliament decided to establish a working group on legal questions related to the development of robotics and AI in the EU, with a focus on civil-law aspects.

In January 2017 this was followed by the adoption of a European Parliament Report with recommendations to the Commission on *Civil Law Rules on Robotics*. The report calls on the Commission to propose EU legislation introducing a register of robots, setting up an EU Agency for Robotics and laying down principles of civil liability for damage caused by robots, which should be complemented by ethical codes of conduct.

The proposed code of ethical conduct would constitute the foundation for the identification, oversight and compliance with fundamental ethical principles of robotics, starting from the design and development phase.

In the European Parliament report's view, the code should not replace the need to tackle all major legal challenges in this field, but should complement regulation and should also introduce a procedure to allow robotics and AI to function in an ethically responsible manner.

While financial services use of AI is not directly cited, the report opens a door to the potential development of any type of European regulation on AI, including in financial services, where algorithms are

widely used and have wide effects.

Credit scoring algorithms raise or lower the scores of people based on external data; investment algorithms can cause big worries, as happened with the 'Flash Crash' of May 2010, in which \$1trn was wiped off the value of markets in no more than 10 minutes.

PRODUCT OR SERVICE?

Algorithms are AI, but it is difficult to determine from a legal perspective whether they are a service or a product.

Algorithms depend on external data sources and on pre-programmed routines and their behaviours correspond in the European Parliament view to some form of liability – contractual or extra-contractual – which should entail some form of compensation. Who would be liable for what and to whom?

According to the results of the 10 January 2017 European Commission consultation on data economy, which contained a chapter on liability related to the Internet of Things (IoT) technologies and autonomous systems, the most frequent damages suffered because of AI use are economic losses, both in terms of pure economic losses or losses linked to a missed opportunity.

The European Commission is consequently looking at whether to

develop model contract clauses and best insurance practices in a specific sector for AI use, or in general every time AI is used. Furthermore, the Commission is looking at whether to develop standards for safety assessments and certification in a specific sector for AI use, or in general every time AI is used.

Should minimum liabilities be borne by certain service providers in certain sectors? A risk-management approach could, for example, allow that liability should lie with the entity most suited to manage the risks, which is often the producer.

Also, the possibility for human supervisors to interfere with AI is a factor which could play a role in the allocation of liability, as could event data recorders which save log-data.

Such changes could be implemented in European law via a general revision of liability law or via the expansion of the scope of Product Liability Directive (85/374/EEC) (PL) or even via the review of the Machinery Directive 2006/42/EC (MD).

The Machinery Directive is currently the object of a report, to be published in early 2018, which aims at checking whether the MD is fit for purpose to new emerging technologies as robotics or IoT.

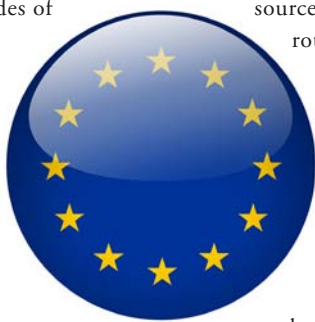
Furthermore, the Commission has also conducted a public consultation on the evaluation of the PL Directive, seeking to assess the adequacy of existing liability rules when damages arise in the context of autonomous systems and advanced robots or IoT systems.

However, Article 2 of the PL Directive explains that the text currently only covers movables and not software or digital services, so the directive may need some "digitalisation".

The European regulators' motivation for regulating could arise from the protection of EU values, especially data protection, privacy and ethics, as well as from the will to avoid individual European member states developing regulation in isolation.

Is AI processing data for legitimate purposes under the General Data Protection Regulation (GDPR)? Are these data relevant and adequate for that very purpose?

EU regulators could, in theory at least, have a say on the types of data that could be utilised and fed in AI, as well as on the role of any interference by its human supervisors. ■



US RETAIL BANKS: BRANCH CLOSURES ACCELERATE



Wells Fargo, Chase, Bank of America, Regions, PNC and Capital One have all reduced their networks by at least 100 branches in the year to end June 2017, writes *Douglas Blakey*. By international standards, however, the US remains overbranched, and there remains scope for further large-scale closures

As programmes to 'rightsize' branch networks accelerate in the US, Capital One has been the most aggressive in terms of cuts.

In the past year, it has axed a net 146 outlets, reducing its network by 18% from 811 to 665 units. One in three Capital One branches have closed since its network peaked at 991 outlets in 2010.

Georgia-headquartered SunTrust has shuttered 8%, or a net 114 outlets, in the past year, reducing its network to 1,311. Since the financial crisis, SunTrust branch numbers have declined by 25% from a peak of 1,759 in 2008.

In the year to end June, Alabama-headquartered Regions also ramped up its branch rightsizing, with a net reduction of 107 units or 7% of its outlets. It now operates

1,492 branches, down from a peak of 2,087 units in 2007.

In total, there are now 80,638 FDIC-insured commercial bank branches in the US, down from a peak of 83,600 as recently as 2012.

Such figures suggest that the US remains significantly overbranched. Indeed, there remain twice as many branches per head in the US compared to the UK.

More than 80,000 branches to serve a US population of 326 million brings out 24 branches per 100,000 people. By contrast with the UK, 8,000 branches serve 66 million, equalling 12 branches per 100,000 people.

Together, the largest 30 US retail banks by branches (listed on page 8) account for more than 41,000 outlets – more than one half of all US branches.

400 BRANCHES AXED

Wells Fargo (down a net 126 units), Chase (down by 129) and Bank of America (-150) all closed more than 2% of their branches in the past year.

Wells Fargo remains the largest US bank ranked by branches with 6,091 outlets, down by only 10% since the crisis. Wells' network peaked at 6,795 outlets in 2009, following its acquisition of Wachovia and its 3,363 branches.

Chase has been the most enthusiastic advocate of the branch channel since the crisis, at least in terms of numbers. In 2008, as the banking crisis peaked, Chase operated 3,195 units. The acquisition of the failed Washington Mutual added a further 2,213 units with Chase ending 2010 with just over

5,250 units. It then bucked the trend towards shrinking branch numbers by adding to its branch channel, with numbers peaking at 5,697 in 2013. Since then, Chase's network has reduced by just over 400 branches to 5,286 at the end of June.

By contrast, Bank of America's branch network has reduced each year since peaking at 6,238 in 2009. In the past eight years, Bank of America has axed more than one in four of its branches, ending the first half of 2017 with 4,604 outlets.

Citi remains one of the most aggressive branch closers; its US network peaked at 1,079 units in 2008. Since then more than one in three Citi branches have closed, leaving just 719 at the end of June. Despite being only the 16th-largest bank in terms of branch numbers, Citi has nonetheless retained its spot as the fourth-largest US bank as measured by deposits.

Even branch evangelist Umpqua has got in on the act, shrinking its network from a peak of 363 units in 2014 to 305 outlets at the end of June this year.

Keycorp is now the 10th-largest US bank by branches with 1,235 outlets, up from 961 last year, following its \$3.7bn acquisition of the 300-branch-strong First Niagara.

Huntington has more than doubled its branch network since the crisis following a number of acquisitions. In 2007, its network was a modest 424 outlets; by June this year it operated 1,056 branches.

HSBC dropped out of the top 30 US branch ranking following its sale of 195 New York-based branches to First Niagara for \$1bn in 2011. HSBC now operates a US network of 230 units, down from 486 in 2010. By deposits, however, HSBC remains a significant US player, ranking the 14th-largest bank ranked by this measure with \$128bn as at the end of June 2017.

Other major players ranking prominently by deposits with limited or no branch networks include digital lenders Ally Financial (total deposits \$79bn) and USAA (\$68bn). At the end of June 2017, 18 US financial institutions had deposits of more than £100bn.

For almost 20 years Bank of America ranked the largest US bank as measured by deposits. No more – Chase has taken the top slot, according to data from the FDIC.

JPMorgan Chase ended the first half on 2017 with total deposits of \$1.32trn, just ahead of Bank of America with \$1.29trn. With total deposits of \$1.26trn Wells Fargo is a close third. ■

US RETAIL BANKS BY BRANCH NUMBERS – END JUNE 2017

BANK	BRANCHES	JUNE 2016	NOTES
Wells Fargo	6,091	6,217	Number peaked at 6,795 in 2009
Chase	5,286	5,415	Number peaked at 5,697 in 2013
Bank of America	4,604	4,754	Number peaked at 6,238 in 2009
US Bancorp	3,173	3,222	Number peaked at 3,238 in 2014
PNC	2,561	2,687	Number peaked at 3,044 in 2012
BB&T	2,192	2,255	Number peaked at 2,255 last year
Regions	1,492	1,599	Number peaked at 2,087 in 2007
SunTrust	1,311	1,425	Number peaked at 1,759 in 2008
Toronto Dominion	1,279	1,288	Number peaked at 1,336 in 2013
Keycorp	1,235	961	2017 includes 300 branches acquired from First Niagara
Citizens	1,187	1,219	Number peaked at 1,654 in 2008
Fifth Third	1,174	1,208	Number peaked at 1,370 in 2011
Huntington	1,056	807	2017 includes branches acquired from FirstMerit
M&T	865	873	Number peaked at 873 last year
Citigroup	719	758	Number peaked at 1,079 in 2008
Santander	719	710	Number peaked at 807 in 2007
BBVA	670	671	Number peaked at 759 in 2010
Capital One	665	811	Number peaked at 991 in 2010
BNP Paribas	622	623	Number peaked at 721 in 2010
Bank of Montreal	594	600	Number peaked at 708 in 2012
First Citizens	554	546	
Comerica	439	473	
Zions	439	447	
People's United	406	391	
MUFJ	361	362	
TCF National	339	360	
Umpqua	305	321	
NY Community Bancorp	262	269	
Synovus	248	253	
Popular Inc.	235	236	

Source: RBI

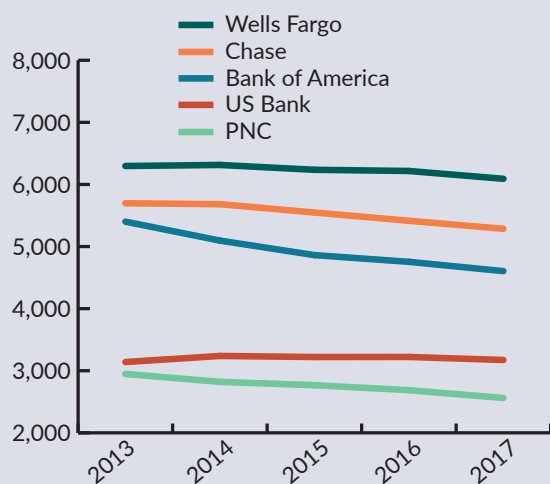
LARGEST US BANKS BY DEPOSITS – END Q2 2017

BANK	DEPOSITS (\$BN)
Chase	1,311
Bank of America	1,287
Wells Fargo	1,258
Citigroup	505
US Bancorp	329
Capital One	289
PNC	258
Toronto Dominion	246
BB&T	163
SunTrust	163
Charles Schwab	162
Morgan Stanley	150
Bank of New York Mellon	145
HSBC	128
Citizens	118
Goldman Sachs	106
Fifth Third	105
Keycorp	105

Source: RBI, FDIC

BRANCH NUMBERS

Top five US bank branch counts, 2013-2017



Source: RBI

CHASE CFO: “BRANCHES STILL MATTER”



Third-quarter earnings presentations can on occasions be a tad tame and attract less interest than full-year earnings and interims. Not so at Chase – in particular from a retail banking perspective.

The retail unit of JPMorgan Chase deservedly took centre stage, driving the bank's third-quarter growth with a 16% rise in net income. Chase's other retail banking highlights included:

- Increased revenue and market share gains in its credit card division, largely thanks to its mass-affluent segment Chase Sapphire Reserve card;
- Average core loan growth of 7.5% year-on-year;
- Chase now ranks number 1 in total US deposits and in deposit growth, driven by strong consumer deposit growth up 9%;
- Client investment assets, credit card sales and merchant volumes were all up 13%, and
- Mortgage lending up 12% and business banking, card and auto loans and leases were each up 7%.

As CEO Jamie Dimon summed up “the US consumer remains healthy”.

As for the analyst Q&A session, one question – and, more pertinently, one answer – stood out. Asked by an analyst from Wells Fargo a question many have pondered: “Why do you still need 5,200 branches? Isn't this a good time to close branches when deposit competition isn't as tough as it might be in the future?”

Marianne Lake, Chase CFO responded: “Branches still matter. Seventy-five percent of our growth in deposits came from customers who have been using our branches, that on average a customer comes into our branches multiple times in the quarter. I know that all sounds like old news, but it's still new news or current news, so the branch distribution network matters.

“Customer preferences are changing and we are not being complacent to that. So net for the year, we'll be down about 125 branches. We've closed more than that, consolidated some and added some, so we're not being complacent to the consumer preference story, but branches still matter a lot and we're building out all of the other sort of omni-channel pieces, as you know, so that we have the complete offering.

“If the customer behaviours start changing in a more accelerated fashion, we will respond accordingly.” ■

LLOYDS: DOWN WITH THE FLAGSHIP?

Most people enter a branch to complete a transaction, not to order a coffee. However, at Lloyds' new 'super branch' you can do both. In a time where branches are closing faster than ever, is this the concept to save the physical channel, or is it too little too late? *Patrick Brusnaban writes*

The branch is looking for a way to reinvent itself. One method is to slim it down, make it easier and quicker to get in and out.

Poland's mBank and Bank of America are two large banks trying to decrease the size of their branches. Lloyds Bank has also stated its desire to shrink branches to keep more of them open. However, one size does not fit all.

Based in Manchester, and made in collaboration with retail strategy and design consultancy M Worldwide, the new flagship branch comes with its own coffee shop, 'breakout pods', biometric technology and a series of events. This has resulted in Lloyds' most expensive branch ever, at a cost of £3m (\$3.9m). So why bring something like this to the UK market?

A spokesperson for Lloyds tells *RBI*: "The way that customers choose to bank with us

is changing. We have seen an accelerated uptake of digital services, we now have over 8.6 million mobile users and over 13 million active online banking users, which means fewer people are using our branches as frequently.

"However, to ensure we continue to give our customers the choice they want, we are investing in our branch network and transforming it.

"We know that branches remain important for the big moments in life and people like to speak to other people face to face. So branches are a vital part of our strategy, and we're investing in our network to make sure it's right for the future," the spokesperson continues.

"As part of this, we're trialling some different types of branches, one of which is the 'flagship' branch format."

BRANCH FEATURES

- Free Wi-Fi and phone charging for all;
- A Digital Zone, where customers can find out more about online services;
- A Business Hub to give local businesses support, and professional space in which they can work and network with each other;
- A local, independent coffee bar at the heart of the branch, and
- Safety deposit facilities utilising the latest biometric fingerprint, allowing customers to store valuable possessions in a safe and secure location. ■

FRONT AND CENTRE

Why choose Manchester to launch this model? While it is an industrious, busy city, most branch closures are focused not in cities but smaller, more rural locations. Often 'the last branch in town' is the one to be closed.

The spokesperson says: "Manchester was chosen because it has a vibrant economy, a strong retail centre and a thriving business community. While the flagship concept is being considered for a small number of other locations across the UK, the Manchester branch has been designed specifically around the needs of the local community.

"The focus on supporting start-ups in Manchester was born from the knowledge that the city has the greatest number of start-ups outside London, but also the greatest number of failures in the first 12 months." ■



PWC REPORT: UNSECURED DEBT MAY HIT £340BN

UK consumers' unsecured debt has reached an all-time high of £300bn, or £11,000 per household. What is more, it is growing at a faster rate than at any time in the past 15 years, and is now an eye-watering 30% higher than prior to the financial crisis, writes *Douglas Blakey*

By 2020, PwC estimates that UK unsecured debt will hit £340bn (\$448), or £12,500 per household.

The figures are sobering. UK unsecured consumer debt is rising by 11% per year, fuelled mainly by soaring credit card, student loan, car loans and overdraft lending. No wonder the Bank of England is concerned about UK consumers' debt splurge.

PwC estimates that UK consumer debt is rising by £80m per day – that works out at almost £55,000 per minute. This represents the fastest rate of growth in indebtedness since 2002.

PwC's report, *Are Britons borrowing beyond their means? Precious Plastic 2017*, concludes that the UK's unsecured debt pile has also grown at least three times faster than secured debt in each of the last five years.

Student debt, credit cards and car finance represent more than 75% of the growth in unsecured lending in 2017.

Car finance has grown by at least 15% for each of the past five years, and 17% in 2017, and represents the largest increase among the main unsecured lending products. Newer forms of lending, such as peer-to-peer (P2P), are also growing, but still only represent a relatively small proportion of total borrowing. Despite the P2P hype, the outstanding loan book of P2P lending is a mere £1.5bn, around 0.5% of all unsecured lending.

Despite the record levels of unsecured debt, political and economic uncertainties, and the prospect of interest rate rises, PwC's *Credit Confidence* survey sampled households across the UK and found that consumers are more confident in their borrowing than at any time since the financial crisis.

However this headline position masks underlying complexity with certain groups under more pressure, in particular:

- **Young people:** Compared to older borrowers (55+), 25-34 year olds in the UK typically hold five times more unsecured debt and are three times more likely to need to use credit to pay for essential items. They are also three times more worried about their ability to repay their debts in the future, and
- **Renters:** Compared to homeowners with mortgages, renters are around twice as likely to have needed to pay for essential items on credit, and are more worried about their ability to repay future debt.

The soaring debt pile also coincides with UK household savings ratios hitting a record low. The UK's headline savings ratio has

declined significantly from the post-financial crisis peak of 4.7% in 2010, and is forecast to fall to -0.4% in 2017 and -1.3% by 2020.

The current record levels of unsecured debt have been amassed against a relatively benign macroeconomic backdrop. Unemployment has fallen to its lowest level in the UK since 1975, and interest rates remain at record lows with households continuing to benefit from low debt-servicing costs.

The outlook is not so positive, however, with PwC forecasting slowing economic growth. PwC expects GDP growth of 1.4% in 2018, followed by 1.8% in 2019. It forecasts a slowing rate of growth in unsecured lending to 7% in 2018 and only 5% in 2019.

High-profile risks such as Brexit-related uncertainty and inflation continuing to outpace wage growth may cause an even sharper reduction in lending growth.

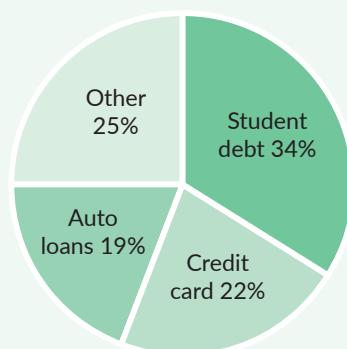
Simon Westcott, consumer credit leader at PwC said: "The rapid increase in unsecured borrowing in recent years reflects a change of attitude on the part of households across the UK. Following the financial crisis, we saw households repaying their unsecured debt, reducing their borrowing by around 10% between 2008 and 2012 – or closer to 25% if we exclude student borrowing.

"However, since then, and despite the uncertainty created by political upheaval, a number of macroeconomic factors have combined to create a climate of rising consumer confidence and borrowing.

"The true scale of the issue has now been put into sharp relief – but there is still more to come. We project that growth in unsecured borrowing across the UK will continue over the next three years, albeit at a slower rate." ■

CONSUMER DEBT

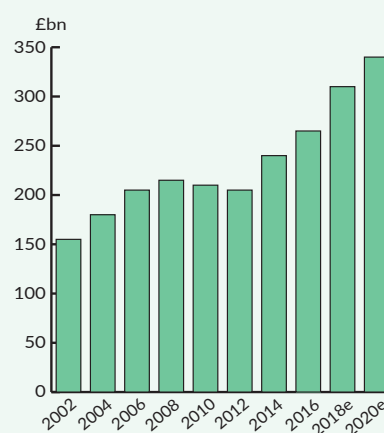
UK unsecured lending by product type (total lending £300bn), 2017



Source: PwC

UNSECURED LENDING

Total UK unsecured lending 2002-2020



Source: PwC

STUDENTS: STILL A KEY MARKET FOR UK BANKS

From competitive overdraft rates to travel discounts and gift vouchers, the major UK banks have a range of incentives designed to tempt school leavers to open student current accounts. But as campus-based branches become increasingly rare, the marketing battleground is increasingly fought on social media, writes *Briony Richter*



Students remain an attractive segment for UK banks – they all want to win school leavers’ custom. Students are seen as the high earners and most profitable customers of the future, and accordingly banks are out to snap up new accounts using an array of tempting initial offers.

Choosing a student account is one of the most important financial decisions a school leaver will make. For many students this will be the first time they open a bank account, and with so many offers advertised, deciding which bank to go with can be a gruelling process. For most students, the ability to bag as large an interest free overdraft as possible will be the main financial benefit.

Each bank surveyed by *RBI* varies its overdraft limits, fees and changes to that overdraft when the account becomes a graduate account. Eventually students will have to pay back the overdraft, and if they are not careful during university there can be high costs.

Nationwide’s Flex Account has one of the larger overdraft amounts on the market. Its interest-free overdraft starts at £1,000 (\$1,317) in the first year of study, rising to a maximum of £3,000. To open this account, students an initial credit of £500 and continue paying that per term to use the Flex Account overdraft.

Daniel King, Nationwide’s head of current accounts, tells *RBI*: “For most students, it will be the first time they manage finances themselves, and we want to make a safe environment for them to establish that.”

Although it remains interest-free once a student has completed their studies, it switches over to a graduate account with some changes to the overdraft and repayment scheme. Assuming at the end of the course a student has the maximum overdraft of £3,000, in the first year after graduation, Nationwide will lower the overdraft limit by £500 to £2,500, then £750 in the second year and a further £750 in the third year after graduating. King says Nationwide does this gradually to give “graduating students a soft landing into the adult environment” and

that it “modelled the account carefully, researching the likelihood of graduate employment, the likely amount of their first salary” to support each individual to the best of their ability.

HSBC also offers a competitive overdraft with £500-1,000 in the first year with no overdraft fee. This amount again increases per year to £2,000 in year two and £3,000 in year three. However HSBC does not guarantee the maximum amount; the amount a student receives will be judged on their credit score account activity. HSBC also accepts level 4+ Apprentices to the student account with the same benefits.

Nathan Donald, senior product manager at HSBC, stresses the importance of student customers, both new and existing. He tells *RBI*: “They are absolutely key to our future customer growth and part of our retail banking strategy now, seeing both the internal support and external traction, and coverage to improve off the back of that.

“With new customers we’ve tended to focus on UK domestic students. Every year HSBC usually has a campaign, and in the last two years the focus has been more on social media and digital because the insight we have tells us they are the channels students interact with the most.”

NatWest offers a slightly lower overdraft to students. In the first term of their course, students can receive up to £500 interest-free, potentially rising to £2,000 for the remainder of the degree. However, as with HSBC the amount given will depend on the individuals’ credit score. To use the overdraft year on year, students must pay in £750 per term.

Lloyds and Santander both have the same overdraft amounts offered as part of their student accounts. The two banks offer up to £1,500 from year one to year three, and if students continue their studies they can apply for an increase depending on their credit score; if the credit score is healthy then Santander can offer up to £1,500.

Lloyds’ overdraft scheme differs marginally during the first year. For the first six months, students have access to an overdraft of £500

from the point of opening the account, which can increase gradually to £1,500 if all the bank's various current account requirements are met.

Lloyds is making some changes to its overdraft and fee systems. From 2 November 2017, there will be daily overdraft fees if students exceed the agreed fee-free limit. For every £7 spent over the arranged overdraft amount, Lloyds will charge £0.01 the same day. The bank believes the new change will be more manageable than implementing monthly bulk charges, and help students keep track of how much they are spending on their overdraft.

TRAVEL DISCOUNTS

One of most practical and money-saving incentives offered is the 16-25 Railcard provided by Santander, that will last four years. Whether students are travelling across the country or taking a quick visit home, they can enjoy a third off all standard anytime, off-peak and first class advanced tickets. A 16-25 Railcard costs £30 a year, so in total this giveaway is worth £120.

NatWest has a similar travel discount: a four-year National Express coach card. Normally a coach card costs £27 for three years or £10 a year. The card gives students a third off standard adult coach fares across the UK. It also includes 10% off travel fares to certain events and festivals in the UK, and 10% off coach fares across Europe when booking through Eurolines. To receive the coach card, students must sign up to NatWest's online banking services.

Santander offers access to 1-2-3 World offers, including special deals on other Santander products, but in terms of incentives, NatWest and Santander's most enticing features are the travel cards with long-lasting benefits.

SPECIAL FEATURES

Travel discounts are not the only products on offer for students. There is an abundance of instant freebies that are advertised to students that will be available to them upon opening a student account.

HSBC offers students and level 4+ apprentices beginning their first year of study a £60 Amazon voucher, plus a one-year Amazon Prime membership, provided applications to the student account are submitted before the end of October 2017. The incentive also offers

students free one-day delivery on certain items, as well as discounts on TV streaming.

Lloyds will provide students with a free NUS card that is valid for three years and offers over 200 student discounts on the high street, including 25% off ticket prices at Odeon cinemas, up to 10% off at Apple, 40% off at Pizza Express, 20% off National Express and 10% discount at the Co-op. The NUS card normally costs £12 per year, so students save a total of £36 for access to numerous discounts if they choose to bank with Lloyds.

Nationwide's guarantee that, as long as a student does not have any credit problems, they will be offered the maximum overdraft is its most eye-catching feature, but added freebies are also available on the account. Using debit or credit cards, students can receive cashback on certain brands using the Simply Rewards programme.

INTERNATIONAL STUDENTS

International students applying for an account come under different schemes depending on which bank they decide to go with.

NatWest will allow international students to apply for its Student Account, with one key difference being that they cannot apply for the overdraft normally offered. They can access other benefits, however, such as the free National Express Young Persons Coach card.

Both HSBC and Nationwide offer current accounts to international students, allowing purchases made outside the UK, and online or mobile banking. They will not offer an overdraft, however.

HSBC's Nathan Donald states: "With international students we have a slightly different approach. They can have a standard basic account that gives the access to saving products. For those who do want to stay in the UK we don't give them lending straight away, but allow them a period of time to start building a credit footprint in the country and then move them to a standard current account where they can have access to lending if they so choose."

Gone are the days when the major UK banks operated campus-based branches: The marketing focus is increasingly online, especially via social media channels.

What has not changed, however, is the banks' belief that the right combination of student-friendly products and services can grab customers who will prove to be profitable for many years to come. ■

UK STUDENT ACCOUNTS – KEY FEATURES

BANK	ACCOUNT	YEAR 1 OVERDRAFT	YEAR 2 OVERDRAFT	YEAR 3 OVERDRAFT	FEATURES	CREDIT INTEREST
HSBC	Student Bank Account	£1,500	£2,000	£3,000	£60 Amazon voucher and one year of Amazon Prime	n/a
Nationwide	FlexStudent Account	£1,000	£2,000	£3,000	Cashback on set brands using Simply Rewards	1% up to £1k
Santander	123 Student Current Account	£1,500	£1,500	£1,500	Four-year 16-25 Railcard	1% £100+ 2% £200+ 3% up to £2k
NatWest/RBS	Student Current Account	£2,000	£2,000	£2,000	Four-year National Express Coach Card	n/a
Lloyds	Student Account	£1,500	£1,500	£1,500	NUS Card valid for three years	n/a
Barclays	Student Additions Account	£1,000	£2,000	£3,000	Cashback from certain retailers	n/a
Halifax	Student Current Account	£1,500	£1,500	£1,500	Cashback from certain retailers	0.10%
TSB	Student Account	£1,500	£1,500	£1,500	Money Planning tool	5% up to £500

Source: RBI

KPMG: UK FINTECH DEAL NEEDED

If the UK is to become the number one fintech destination, it needs a single policy vision, co-ordinated open standards, enhanced regional engagement with support for talent, and greater access to capital, writes *Douglas Blakey*

The UK is already well established as a world-leading financial and business services centre, and a global hub for fintech, but in an increasingly competitive global market, the UK needs to establish a single and consistent position to enable it to market itself more effectively as a fintech destination and source of fintech services.

This is the main finding in an outstanding report published by KPMG, *The Value of Fintech*. The report argues that additional steps could be taken to improve policy and regulation, for example by clarifying the perimeter between regulated and unregulated activities and building on the successes of sandboxes with further regulatory support.

There is also considerable scope to identify and assist UK regions to become regional hubs and enablers of the growth of the wider fintech ecosystem. Further improvements to infrastructure, support for talent development, and promotion of the UK as a global fintech hub will contribute to the continued success of this vibrant and valued sector.

KPMG's report notes several examples of how fintechs enhance the role of financial services firms and help them provide products and services more effectively. It identifies five principal themes:

Improving financial inclusion: Fintechs enable provision of new products and services to customer groups who have not been able to access traditional financial services. These are made possible through the provision of simple products at lower costs – for example, Cuvva, TransferWise. Fintechs can also give the underbanked access to innovative solutions – for

example, aire, Doreming – and offer SMEs access to funding – for example, iwoca.

Enhancing customer experience:

Empowered by new technology, fintechs are able to offer personalised services and communicate interactively with customers, significantly enhancing customer engagement and experience. Simplified solutions for SMEs include examples such as those provided by iZettle and Tide.

Increasing transparency: Trust is the foundation of the financial services industry. Fintechs enable financial services companies to increase clarity of services and products, and provide transparency on fees and charges. Examples fintechs helping to improve transparency and increase trust include Simply Business and Bold Penguin in commercial insurance brokerage, Pension Bee in pensions and savings management, and Broly in retail insurance

Improving security and compliance:

Retail and SME customers are vulnerable to fraud, cyberattacks and other online risks. For example, 74% of UK small businesses reported a cybersecurity breach in 2015, and financial fraud losses in payment cards, remote banking and cheques totalled around £770m (\$1.01bn) in 2016. Multiple fintechs help businesses to detect fraud – for example, Ravelin – and manage risk and compliance issues – for example, Trulioo, Covi Analytics.

Providing support and guidance:

Navigating complex financial products and services can be difficult for end users. Fintechs use technology such as artificial intelligence and big data analytics to provide cost-efficient and tailored customer support and guidance. Examples include Neos in insurance for risk tracking,

Oval in banking and Nutmeg in asset management.

Fintechs have received close to \$1.5bn in investments into banking, insurance and asset management each year since 2014; four factors have primarily driven growth:

- **Technological evolution:** Fast-paced technological development has combined with lower technology costs;
- **Emerging customer expectations:** Customers now demand digital services and experiences similar to other sectors;
- **Availability of funding and capital:** Funding into fintechs has increased significantly in the last few years, and
- **Support from governments and regulators:** Both governments and regulators recognise fintech as the evolution of financial services, and proactively support them.

KPMG estimates that the largest share of fintech investment has been in banking, with payments and lending comprising around 65% of all banking fintech investments. Personal finance, peer-to-peer (P2P) services, money transfer and trading platforms are other growth areas.

The UK financial services industry has revenues of around £200bn, making up approximately 11% of GDP, providing a significant market for fintechs. The UK market also has a high proportion of consumers with digital skills.

The UK has good availability of capital for early-stage companies through a strong seed-funding landscape and the supportive environment created by the government. However, the UK has limited growth capital to support late-stage startups.

The UK government is seen as very supportive of fintech growth, with proactive initiatives such as the newly established FinTech Delivery Panel, the Financial Services Trade and Investment Board FinTech Steering Group, and enabling Fintech Bridges.

UK regulators the PRA and FCA are seen as global leaders, providing an amenable regulatory environment for fintech growth. Initiatives include the FCA Project Innovate and regulatory sandboxes, and the PRA/FCA New Bank Start-up Unit. The industry believes the regulators can further enhance fintech growth through additional initiatives.

The UK and London have a good talent pool to support the growth, but fintechs would benefit from more working spaces with ready ancillary services. ■

TECH INVESTMENTS PAY OFF FOR CTBC BANK

Taiwan's CTBC Bank picked up three awards at the fourth annual CEPI Summit in Singapore hosted by RBI's sister title *Cards International*. Senior VP Amy Lim talks tech strategy and the local banking landscape with *Anna Milne*

The rate of change in consumer payment behaviour is accelerating across Asia-Pacific, driven by technology and regulation, says Amy Lim.

"Technological innovation will create heightened expectation from both customers and retail merchants. Not only mobile in payment solutions but in other value-added services such as location-based services, e-vouchers and in-app purchases. These are all being developed through mobile technology.

"In the future, we expect that more smart applications will affect customers' shopping behaviour. IoT, AI and usage of big data will have a huge influence on membership management, mobile marketing, and even seamless payment implementations such as Amazon Go."

CTBC is successfully tapping into the millennial segment's desire to adopt the latest in digital services. Lim says that their feedback is providing valuable insight into the improvement of the bank's products and services.

"Taking P2P payment as an example, customers want to use their instant

messaging tool or social media to complete the money flow. This is a case of integration between customer behaviour and new technology.

"As regards regulation, the government's attitude will not only accelerate the development of new initiatives but also contribute to cost efficiency. However, the regulator also faces huge differences in changes within business models, and continuous communication between the government and the various players is therefore crucial."

MONETISING DATA

Lim is upbeat about the prospects of monetising the tons of data held by banks: "Payments are the easiest tool by which to attain customers and, by default, their data. Based on these data and traffic, banks can gain a deeper understanding of customers' needs, location, preferences and online or offline behaviours.

"As a result, customers can receive real-time information that is customised to fit their preferences. These new

applications may provide an opportunity to earn income from cardholders or other partners. In the future, the revenue sources will become diversified and quite different from the traditional banking revenue model."

CTBC is working ever more closely with a number of partners to boost its digital strategy.

"Co-operation will build sustainable success in the future. Take LINE Pay card as an example. CTBC collaborated with LINE Pay to issue a co-branded card at the end of 2016. We had issued more than 700,000 cards within eight months.

"The key success factors were a strong product feature, mobile-based process, and integration with social media. With this product, customers can apply for a LINE Pay card through their LINE account, register the card to the LINE Pay mobile payment solution, and keep on top of rewards points accrual and all previous transactions through LINE.

"In the mobile world, our competitors and partners are becoming more diversified. CTBC tries to learn from these non-financial institutions. They have strong advantages on UI/UX, speed of IT development, and innovation. As a result, CTBC consults many external opinions and leverages partners' strengths in developing and delivering our services."

Lim says the bank's working relationship with its domestic government has been positive, and that the regulator can be a "powerful friend".

"The government's attitude is a key factor. There are many cases around the world showing that the government can accelerate fintech development. The UK's sandbox scheme and Singapore's full support of innovation both create excellent environments for existing players and start-ups. Under the government's support, enterprises can be helped in three ways: attracting good talent, reducing compliance cost, and accelerating new models."

Looking ahead, Lim says the younger generation is definitely the bank's primary target market: "This segment is more active in spending, pursuing a better life, and accumulating wealth by investing. Providing suitable products for this segment is critical. They may not need some traditional product features but they want to manage their account more online, prefer personalised products, and chatbot services." ■



Amy Lim (right) with Anna Milne at the CEPI Summit and Awards

OCTOBER NEWS

Diebold Nixdorf IMS: No more in-branch ATMs?

At Diebold Nixdorf's International Management Seminar – its 30th such event but the first as Diebold Nixdorf since its merger – particular attention was paid to 'connected commerce'. However, ATMs may not be part of this connection.

Philippine Risch, director of ING's branches and cash in the Netherlands, believed ING's purpose was to help its customers stay ahead by being "a tech company with a banking licence".

Is there a need for branches in an increasingly digital world? Risch believed so. At the event, she said: "The ultimate experience is ultimate digital mixed with ultimate human experience."

However, she highlighted that the branch would only be useful if it was there to satisfy a customer's needs. Even if a branch is not

needed, customers can feel relieved to see one. Additional services a branch can provide are human help and guidance.

Risch added: "Sometimes people just even want to vent at their bank and appreciate general attention. The human contact makes the difference in a customer relationship. The human touch adds to the heart and the emotion of the digital relationship."

ING's branches will focus on being advice branches or experience branches.

One thing that might not have a future in ING's branch, however, is ATMs. Risch would not elaborate, but said cash will remain in a large role in Dutch society, but will not play a huge part in branches. Therefore, ATMs would eventually be removed.

Christian Weisser, senior vice-president and MD for Europe, the Middle East and Africa

at Diebold Nixdorf, said: "We see four global forces in our space: automation, digitalisation, individualisation, and a strong trend to consume everything as a service – cash as a service, ATMs as a service, everything is a service. These forces drive retail and banking."

Weisser described the future as not necessarily a 'cashless' society, but definitely a 'cash-lite' one.

With PSD2's imminent arrival, the four "global forces" combine and the financial sector needs to embrace this. He added: "Connected commerce means providing an app that isn't only financial advice, but also provides tips for lifestyle.

Weisser concluded: "By 2018, a billion accounts' information will be available. So why not be the first to aggregate all this information into your app?" ■

TORONTO DOMINION CLAIMS CANADIAN FINTECH FIRST

Toronto Dominion (TD) has launched what it says is a unique programme to support young fintechs and startups in their patent applications.

TD has earmarked C\$3.25m from its fintech investment pool to provide patent application funding and expertise specifically to new ventures. The goal is to help high-potential, early-stage ventures secure intellectual property rights and enable them to stay focused on rapid growth and innovation.

TD is the first bank in North America to offer a non-equity-based programme specifically supporting the patent application process for early financial sector startup ventures. The initiative builds on TD's commitment to build strategic relationships with fintechs ranging in size from seed-stage startups to more established companies that have received past rounds of funding.

TD has already made a number of investments in companies that are positioned to lead the development of next-generation financial solutions.

"The success of young, innovative startups is vital to Canada's future, and to

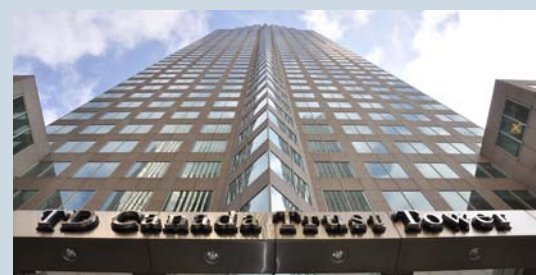
TD's," said Colleen Johnston, group head, direct channels, technology, marketing and corporate and public affairs at TD Bank Group.

"TD is building the bank of the future, and strong relationships with leading technology and fintech companies provide us with enormous insights while fuelling our own creativity and innovation. Ultimately, the customer wins when banks and fintechs collaborate."

A study entitled *The Bright Side of Patents* from the US Patent and Trademark Office last year found that startups that are able to secure patent rights to their ideas were more likely to succeed with greater revenues, more staff and financing opportunities than startups who did not secure patent rights.

While Canada has witnessed growing numbers of its citizens using financial technology in the past year, it continues to lag behind many of its international peers.

In Canada, only 18% of digitally active Canadians have used two or more fintech services in the past six months, compared with 33% globally, according to EY's *FinTech Adoption* index.



By contrast, comparable figures for the UK, Australia and Germany were 42%, 35% and 35% respectively; even across the border in the US the figure of 33% is almost double the Canadian figure.

Appetite for fintech investment is high at TD's rivals; in June RBC acquired Wiser Investments, a Toronto-based financial-technology firm, and launched its own innovation lab with its asset management division, RBC Global Asset Management.

Scotiabank has partnered with Kabbage and CIBC has teamed up with Thinking Capital for online small-business loans.

Canada-based fintechs secured \$368m in venture capital funding in 2016; 32 of the most innovative local start-ups have been selected to exhibit at the annual Sibos gathering in Toronto in mid-October. ■

TEMENOS 1 INFOSYS 0: TEMENOS BAGS MAJOR DEAL FROM SANTANDER'S OPENBANK

It is, as Temenos says quite fairly, "a material deal".

Cue David Arnott, CEO of Temenos: "Temenos is honoured to have been selected by Openbank to support it with its digital journey and growth plans.

"This is a highly disruptive and strategically important deal, demonstrating the acceleration in thinking among tier 1 banks as they move to their digital future and reinforcing Temenos's position as the partner of choice for the world's largest banks.

"To offer a truly digital experience which consumers demand, banks need to renovate their legacy systems. They see the benefit in adopting a build-and-migrate approach to minimise time-to-market and to extract maximum value."

Temenos reportedly beat off a rival proposition from Infosys's Finacle offering to bag the Openbank deal. Ezequiel Szafir, CEO of Openbank, added: "We are very excited to count on the know-how and speed to market that Temenos will provide us, as we continue to build one of the best digital banks in the world"

Openbank's ambitions are ambitious – not to say wildly ambitious given its slow growth to date since its initial launch.

It currently has around one million customers. In the next year it aims to target a growth in customer numbers to 30 million. That is not a misprint; it is targeting 30 million customers in the next 12 months, representing a major ramping up of ambitions for a banking unit that launched initially as a telephone banking subsidiary as long ago as 1995.

In June this year, Openbank revealed plans to overhaul its operations, transferring all IT and client transactions to the cloud as well as an overhaul of its internet and mobile banking offerings.

Santander said its new Openbank platform has been developed over the past 15 months in Spain using some of the most advanced technologies, and is one of the first banks in the world to use a cloud-based IT infrastructure.

New features launched in the past

quarter include:

- Completely digital customer onboarding process with videoconference identification or, if the customer prefers, via messenger or using the IBAN of any bank;
- Customers can see their account status at-a-glance and personalise and configure according to their needs. They can also include their own photograph or avatar, increasing security;
- Access to a 24/7 virtual branch where each customer has their own, dedicated team of account managers;
- Expenditure categorisation that can be compared with the previous month;
- Cards can be blocked or unblocked from a smartphone if lost, and
- Information about investment trends among other clients or access to consumer credit in a few steps.

Ana Botin, Banco Santander's executive chair, said: "We want to offer personalised financial services, accessible from

anywhere, at anytime. For people who prefer an exclusively digital service that is simple, agile and available via smartphone, with the guarantee of the Santander Group, Openbank is the answer".

Openbank claims to be one of the first banks to make extensive use of artificial intelligence (AI) and machine learning, allowing the bank to tailor product offerings to individual customers, increase security and fraud protection, and continuously improve the speed and quality of credit decisions such as mortgage approval.

All its commercial activity and risk algorithms for loans and credit cards are fully based on AI.

The digital marketing is also partly based on programmatic purchasing, which enables the bank to deliver more customised and relevant advertising.

Openbank has expanded its range of products to offer a complete suite of banking products to all of its customers from current accounts and deposits, to loans and mortgages and a range of investment products including funds, pensions and shares. ■



MORTGAGE COSTS FOR NEW HOME BUYERS TO RISE IN 2018 AND 2019: SCOTIABANK

At first glance: some bad news for Canadian homeowners. With predicted interest rate rises on the way from The Bank of Canada, mortgage costs are set to rise. But as the majority of Canadian mortgage-holders are on fixed mortgages, such as five-year terms, the effect of higher interest rates will only gradually filter through to them.

The Canadian economy remains in rude health. According to research from Scotiabank, growth is expected to hit 3.1% during 2017 – more than double most estimates of the Canadian economy's underlying potential this year – before slowing to 2.0% in 2018 and 1.5% in 2019.

Scotia expects momentum to continue through the second half of 2017 to sustain a forecast of 3.1% real GDP growth for the whole of 2017—up substantially from the 2.0% the bank estimated at the beginning of the year.

Although the sources of Canadian growth are broadening, they still remain heavily concentrated in consumption, which is unlikely to be fully sustainable as interest rates rise.

Looking ahead, Scotiabank Economics projects that potential growth will average 1.7% in 2017-2019; this is at the upper bound of the bank's projections.

Consumers remain the biggest drivers of Canadian economic activity with consumer confidence is at its highest level in a decade and major purchase plans remain elevated.

However, consumers are unlikely to be able to maintain their recent spending momentum. In particular, motor vehicle sales are set to move lower during 2018-2019 after five consecutive record-breaking years that have driven per household purchases to record highs.

Rising interest rates also could squeeze household budgets and divert some discretionary spending. A 100bps increase in the effective interest rate, all else equal, would lift the aggregate household debt-service to personal disposable income ratio from its current level of 14.2% to just below 16%. ■

OCBC AND STARHUB AGREE SINGAPORE'S FIRST BANK-TELCO STRATEGIC PARTNERSHIP



Bank partnerships with telcos are not a new concept – but the first such deal in Singapore deserves a positive mention.

OCBC and telco StarHub will each invest S\$6m (\$4.44m) in research and technology over the next 12 months to drive Singapore's collaborative economy.

However, that is just the start: Both outfits have big plans to harness and understand customer needs with the aim of delivering more relevant solutions, experiences and offers to a combined customer base of over five million.

OCBC and StarHub will also explore opportunities in artificial intelligence and the Internet of Things to enhance customers' connected lifestyles at home, at work and on the go.

This looks like a win-win for both outfits – and for customers. A store within a store has been opened at OCBC's Orchard Gateway branch, flagging up initial and future customer benefits of the deal.

Combining OCBC's financial services offerings and StarHub's catalogue of infocommunications and entertainment services, customers can now seamlessly manage their banking and digital lifestyle needs in one store.

This store-in-store concept will be expanded in stages to cover more retail outlets. In addition, all current and new customers of OCBC and StarHub can sign up at www.innovatingtogether.sg, to receive an additional 3% rebate on their StarHub bills for 12 months.

Rebates of up to S\$5 per month will be credited into customers' OCBC credit card or bank accounts.

Other notable banking/telco joint ventures include:

- Western Union and telco MTN teamed up in the Ivory Coast and Uganda;
- MTN and Diamond Bank partnered to boost the mobile money market in Nigeria;
- China Unicom and China Telecom started selling monetary fund products to customers through various financial platforms;
- In Nigeria, Etisalat agreed a deal with Support Microfinance Bank, offering its KwikCash instant loans;
- Innovative Polish digital bank mBank partnered with Poland's largest telco, Orange Polska, for which it will provide white-label banking services, and
- National Bank of Kenya and Airtel Kenya teamed up to offer each other's services to their respective customers

In France, Orange has taken a different tack; it is launching direct bank Orange Bank in November, created following its acquisition of a 65% stake in Groupama Banque.

That acquisition was made more than 18 months ago amid much funfare. A lot is riding on the initiative and the Orange Bank launch has already missed two deadlines.

According to Orange, the launch of its banking arm represents the biggest IT Project in France in 2017. The PR material talks of the creation of a new mobile bank but the physical channel is not excluded: Orange is redesigning many of its stores to incorporate banking sections. ■

IPPB RAMPS UP GROWTH PLANS

The India Post Payments Bank (IPPB), launched with the government's aim of becoming the "most accessible bank in the world", is on target to open almost 650 branches across India.

The IPPB aims to leverage technology to target the unbanked and underbanked populations in more than 150,000 villages. As part of its expansion plans, all 155,000 post offices and 300,000 postal workers will be equipped with mobile terminals which will provide the full range of payment solutions offered by IPPB.

The Indian government has also launched e-IPOs (Indian Postal Orders) in denominations of INR10, INR20, INR50 and INR100 as a pilot project in two regions, with plans to expand to all of India by the end of the year.

DOORSTEP BANKING

Empowering 300,000 postal workers to operate as banking correspondents is part of the Modi government's drive to reduce reliance on cash.

The mobile device carried by the postal workers will enable customers to deposit money into their accounts, pay utility bills, book tickets for trains and buses, pay for services at public hospitals and fees at government schools, and buy financial products such as insurance.

IPPB has around 300 million customers, of whom 180 million are active users. Plans are now being made to promote IPPB via a nationwide advertising campaign. ■



LEBANON'S BANK AUDI DEPLOYS NCR SELFSEV 80 SERIES ATM SOLUTIONS



Lebanese lender Bank Audi has deployed NCR's SelfServ 80 Series ATM to improve the "omnichannel experience" for its customers.

Bank Audi will add the new NCR SelfServ 82 and NCR SelfServ 84 models to its network. The ATMs have built-in interactive video banking features, allowing financial institutions to provide a tailored service to customers by a live teller at the ATM. Interactions are conducted via an 19-inch multi-touch display.

The NCR SelfServ 80 also includes a 10-cassette cash-dispense capability to reduce cash replenishment costs, and features enhanced security measures that

protect against threats such as skimming.

Bank Audi's head of innovation, Omar el Zein, said: "The NCR SelfServ 80 Series delivers the next generation of omnichannel self-service experiences at the ATM that will help us grow revenue, reduce cost, manage risk and enhance customer experience.

"Bringing world-leading banking experience to our customers remains a key strategy for Bank Audi, and the introduction of NCR's innovative ATM fleet, that offers seamless omnichannel experience across a full range of interactive and assisted service transactions, reiterates our commitment." ■

NCR: UK consumers expect more from banks

Eighty-seven percent of UK adults want banking services to be personalised to individual users, but 43% believe that their bank does not deliver.

According a survey of more than 1,000 adults by NCR, UK consumers have high expectations of their banks, but many do not consider their expectations to be met.

Ninety-four percent of respondents agreed that banking should be seamless across all devices and platforms, but fewer than one in five respondents (18%) strongly agreed that this was the situation with their banking experience.

Only 14% believe that their bank is innovative, substantially below the figure of 91% of

respondents who think it should be.

However, despite the lack of met expectations, 98% of respondents held accounts with traditional, incumbent high street banks rather than a newer challenger such as Monzo, Atom or Starling.

Joe Gallagher, vice-president and general manager, self-service and branch at NCR, commented: "As consumers, it's only natural to expect that the companies we work with understand us. As our expectations rise, it is becoming increasingly important for banks to show that they really do understand us as individuals, and that they are taking steps towards improving personalisation and customer experiences across the banking landscape." ■

ATOM CLOSES IN ON £1BN IN DEPOSITS

UK-based mobile-only Atom Bank has exceeded £900m (\$1.2bn) in deposits less than two years after launching its first savings product.

Atom's annual accounts show that the startup had £538m in deposits from over 17,000 customers at the end of March. This means it has attracted close to £400m in just four months.

They also show Atom has received over £300m of small business loan applications and lent out close to £100m in loans and mortgages by March this year.

Backed by musician Will.i.Am, who is also a strategic board advisor, Atom was founded in 2014 in Durham by Anthony Thomson, co-founder of Metro Bank, and Mark Mullen, former First Direct CEO. ■

Taiwan's O-Bank goes digital with Avaya

Taiwan-based O-Bank (Wangdao) has launched operations as a digital commercial bank, having deployed Avaya multi-channel customer-engagement technologies, including Avaya Breeze.

The transformation enables O-Bank to serve customers for "long hours and beyond boundaries". The bank can offer personalised services to customers by direct interaction through a video link.

Formed in 1999, and then known as the Industrial Bank of Taiwan, O-Bank was restructured in early 2017. Wangdao is O-Bank's Chinese name, meaning fulfilling oneself by benefiting others.

The Avaya Breeze solution with client SDK enables O-Bank to support various business processes, and allows it to meet local regulatory requirements, while the open-standard architecture enables the bank to reduce its operating costs.

O-Bank vice-president Lin Tom said: "Avaya solutions provide the characteristics and advantages that meet our needs, allowing us to establish a simple and responsive contact centre integration framework and help us succeed in the digital banking market in Taiwan."

Avaya Greater China president Chen Wei commented: "Our successful partnership with O-Bank has provided valuable experience for Avaya's transformation and added to our continued confidence." ■

CANADIAN EMPLOYERS STEP FORWARD ON DIVERSITY; FALL SHORT ON INCLUSION

Canadian employers overwhelmingly agree on the benefits of a diverse and inclusive workplace, but only a small minority take advantage of those benefits, according to a report from Royal Bank of Canada and the Institute for Canadian Citizenship, writes *Douglas Blakey*

D*iversity and Inclusion: We're Not Doing Enough* is based upon an extensive survey of 64 leading organisations that collectively employ 1.2 million Canadians, as well as a series of follow-up interviews and roundtables.

Developed for the 6 Degrees Citizen Space conference, the findings paint a mixed view of the progress being made on diversity and inclusion in the Canadian workplace.

"The purpose was not to paint a rosy picture or pat ourselves on the back for diversity well done," says John Stackhouse, senior vice-president at Royal Bank of Canada (RBC). "We found the majority of organisations surveyed see themselves as being diverse; however, while they are successful at building diverse workplaces, the next step of inclusion often remains elusive."

The results of the survey point to the need for new thinking on diversity and inclusion. In particular, businesses need to figure out ways to measure the business impact of inclusion – with only about half making an attempt to measure their diversity initiatives – and ensure that diversity and inclusion are reflected across all levels of an organisation.

The report also reveals that Canadian employers still fall significantly short on diversity and inclusion for indigenous peoples and individuals with disabilities.

The survey accompanies a companion work, *All of Us: What we Mean When We Talk About Inclusion*, authored by Sarmishta Subramanian, editor-in-chief of the *Literary Review of Canada*. Together, they form a comprehensive look at inclusion, from what we mean when we talk about it, to what action Canadian

employers are taking to address inclusion in the workplace.

"Engaging in this exercise starts a necessary conversation about inclusion off on the right foot, by acknowledging our shortcomings and understanding our successes," says Charlie Foran, CEO, Institute for Canadian Citizenship.

"Truly inclusive and welcoming societies are better positioned to remain competitive. Newcomers who feel engaged are more willing to take chances, think differently and spur the progress that we call innovation."

HIGHLIGHTS

Highlights from the survey include:

- Employers are paying attention: 81% provide internal networks such as affinity groups to foster a diverse workforce, while 75% have initiatives in place to develop high-potential talent;
- Every respondent either strongly agreed (87%) or agreed (13%) that inclusive teams make better decisions than teams that are not inclusive;
- A majority either strongly disagreed (34%) or disagreed (34%) that diversity and inclusion can have drawbacks;
- 82% of respondents strongly agree that inclusion is required to translate diversity into performance results such as innovation;
- There was an overall consensus that organisations should do more to build a diverse workforce (46% strongly agreed and 48% agreed);
- Only 55% of employers attempt to measure the impact of their diversity initiatives, and
- Organisations were most likely to say

they lagged behind in diversity and inclusion with respect to indigenous peoples and persons with disabilities.

Speaking with *RBC* last month, Richard Nesbitt, former COO of CIBC and now president/CEO of the Global Risk Institute, said promoting women into board and senior management roles is essential for the health of a business.

Co-author with Barbara Annis of the book *Results at the Top: Using Gender Intelligence to Create Breakthrough Growth*, Nesbitt said: "Women on the board and in senior roles improve financial performance."

Nesbitt explained that *Results at the Top* is "directed at men and is written in terms they will understand". In researching the book, he looked at 60 studies from around the world, published in the past 20 years. "All but two of the studies found that financial results will be better if you include more women on boards – the other two said it made no difference."

But compared to other industry verticals, such as fintech in Silicon Valley, Nesbitt said banks are performing relatively well in terms of promoting gender equality. "Look at the major companies on the Toronto stock exchange – only 14% of their directors are women. The banks, by contrast, have taken a leading role. Take RBC for example – 40% of its senior roles across the entire bank are held by women. RBC is a real leader here.

"Across the Canadian financial services sector, there are grounds for encouragement but the change is not happening fast enough for me; there is room for improvement." ■

HOW AI IS TRANSFORMING BANKING AND THE TRADING FLOOR

We have three main desires from banking and financial services: any-time transactions, tailored services and assurance of security. Technology has been a key driver in delivering these, says TCS Scotland's *Gopalan Rajagopalan*

Today, one innovation above all is shaping the future of financial services (FS) for retail banks or global financial institutions: artificial intelligence (AI).

It is difficult to read any analyst or trend reports about the future of banking and FS without mention of AI innovation. In many respects, this is because AI is already having a significant impact. Take Swiss bank UBS, for example, which recently announced that it is using robots on the trading floor in an attempt to boost traders' performance.

With AI set to continue changing the financial services landscape, it is essential that business leaders think carefully about where it can be integrated and how its development is set to impact the banking and FS sector.

According to a recent TCS study, 86% of business leaders in the banking and FS sector said they were already using this technology. Fast-forward a few years and almost every executive responding believed they will have incorporated AI into their operations at some point on the value chain by 2020. It is clear that AI will play an increasingly important role in driving change in the FS sector.

The FS sector has often been on the front foot when it comes to innovation and new operating models, whether in retail with the introduction of the world's first ATM in London in 1967, or the more recent launch of contactless payments. In the 1980s, the UK's 'big bang' saw the deregulation of the sector, with the introduction of electronic trading that fed rapid expansion and growth. More recently, the wider FS sector has seen areas such as blockchain drive further change.

According to consultancy Oliver Wyman, a major way in which technology is changing

the FS industry is through automation. A study launched at this year's Davos claimed that automation would allow the sector to cut costs as a proportion of revenues by 15%; AI was cited as central to this development.

Take how AI is being used to improve customer service at Barclays: Staff are developing an AI system similar to Apple's Siri to let customers talk to a device and get information they need for key transactions.

And when it comes to the tough decision of whether a bank can lend to customers, AI can help. A quarter of banking leaders responding to our study said AI would increasingly be used to help them decide to whom to extend loans, and even where to invest.

Venture capital firm CircleUp uses AI and machine learning to determine which companies to fund. Its crowdfunding online platform, Classifier, has evaluated more than 10,000 potential deals carried out by the firm's analysts in the last five years. Since March 2014, the system has helped the firm's investment analysts screen deals, dramatically increasing the number of possible evaluations.

The numbers speak for themselves. With Classifier, a team of fewer than 10 analysts can review 500 opportunities per month, versus the 500 evaluations done per year by the average private equity firm.

AI can also help banks that have to say no. Goldman Sachs recently invested in a startup called Kensho, that uses AI to decipher unstructured data such as online articles and social media to spot trends. This can lead to banks being able to identify potential customer financial problems that might force the bank to withdraw credit.

Finally, with security an ongoing concern for banking customers, it is no surprise that

70% of FS executives use AI technology to detect and deter security intrusions. More than ever, with hackers' increasingly advanced tools, it is technology's turn to strike back, and AI is a vital to this battle.

Investment in AI can support innovative customer solutions and operational improvements, but what about profit? Can it drive revenue and growth? The answer is yes. In fact, based on the TCS research, banking and FS executives found that investment in AI helped reduce production costs by 13%. Executives also reported a 17% average revenue rise in areas of AI initiatives.

It is no surprise that FS staff are reaping the rewards of AI. In 2015, the average bank or FS firm spent \$77m on AI initiatives. Remarkably, four companies TCS surveyed spent at least \$1bn.

The industry must also address AI's impact on jobs. Interestingly, executives reported that AI investment will, in fact, lead to significant job creation. Companies will have to add new jobs to develop and manage the developing technology, necessitating new skills and approaches.

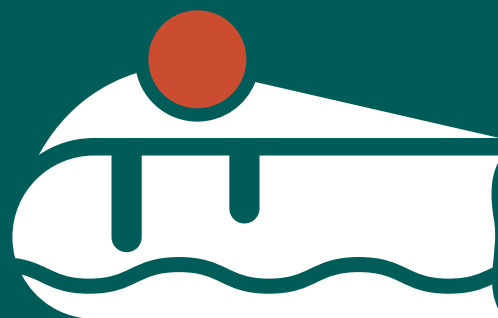
The banks surveyed said AI resulted in an average increase of 10% in jobs in 2015 in the departments using the technology. They projected that number should increase to 13% new jobs on average by 2020, and 16% by 2025 – many of which do not yet exist.

Executives said that AI will be crucial to their ability to compete in the coming years. Some 59% said this technology was highly important to drive competitiveness. Yet there are also challenges. For example, banking and FS executives admitted that managing the security risk of AI systems is of paramount importance. The challenge of developing AI tools that are able to improve decision-making was also reported as a potential buffer.

Investing in the right AI technology can have a major impression on operational efficiency, but success boils down to customer impact, and the best results will be realised only if they are improving the end user's experience. If AI can save time by pointing a consumer towards the most appropriate financial product, then great, but if it gets in the way of a seamless experience and frustrates end users, then there is a problem.

Ultimately, perhaps the best lesson to take from the TCS study is that the technology's long-term success will be defined by how AI enhances a customer experience or enables a banking employee to better service a customer. The good news is that it looks like AI has the capacity to do this in spades. ■

HOW THE BIG BANKS CAN RECLAIM A PIECE OF THE PIE



The breadth of services that traditional banks can offer consumers, in contrast to fintechs' largely single-service offerings, will prove to be their golden ticket to customer retention and loyalty, according to Salesforce senior vice-president and UK head **Gavin Mee**

One of the hottest topics at every industry event I have attended recently is the threat of fintech disruptors.

As more and more of these small, specialist firms launch – think Monzo, TransferWise and Venmo – many retail bankers seem concerned that their size and portfolio are hindering them in the battle for customers.

Actually, I think it is quite the opposite. By offering a range of services, retail banks ultimately create more opportunities to understand their customers and therefore engage and grow with them – opportunities that single-service firms do not have.

But while this is an advantage, there is a hidden disadvantage: multiple systems that each hold a fraction of the full customer story. We all know the deal: insurance is one department, mortgages is another, and they rarely speak. So it is no wonder that 52% of UK millennials who have a current or savings account prefer to do activities using a fintech company's services versus the similar services provided by their bank.

Clearly, the first step for banks to win back a piece of the pie is opening up data across the business, breaking down the data silos and connecting the dots in order to gain a single, 360-degree view of the customer. That means the full organisation can see a customer's journey, understand their preferences and provide them with an insightful service every



single time. Every service creates an additional customer 'touchpoint' – useful for gathering the data needed for a holistic view. And empowering employees with the insights they need to take a customer-centric approach means data simply must be shared consistently across the business in order to truly know and understand the customer and offer them service that delights them across any channels with which they choose to interact.

For example, if a customer calls their bank on Monday to inquire about lending and borrowing, requests further information about a loan in their app on Tuesday and walks into a branch on Wednesday, the teller should know exactly where the customer is in their journey and have relevant offers and advice ready. I am delighted to see that many UK banks are already starting to do this.

PERSONALISATION AT SCALE

What is even more exciting is that leading banks are taking it further. When data is shared in the form of this single customer entity, it can provide the foundation for all functions of the bank – selling, onboarding, servicing, cross-selling and collaborating.

Product teams are therefore focusing on the overall customer experience, and it is here that these banks can really make a difference compared to disruptors: having personalised offers across a broad spectrum of services – banking, mortgage, insurance, bill payment

and more. Now add in the convenience of physical branches, and you can see why it is a very compelling proposition.

In the very near future I think we will see successful banks enhancing this personalisation with artificial intelligence and predictive intelligence technologies. Customers now expect every touchpoint with companies – including banks – to be immediate and proactive. In fact, 65% of consumers expect companies to interact with them in real time. What is more, according to Salesforce's 2016 *Connected Customer* report, 45% of consumers say that by 2020 they will switch brands if a company does not actively anticipate their needs.

Today's technology is able to piece together all the interactions a customer has with a company including their purchase history, behaviour on a website, consumption of digital ads, and conversations with customer service. Predictive intelligence can use this insight to help banks serve up the perfect offers for each customer, from rewards credit cards to loans, and onwards to financial planning and advice.

It has always been the case that the firms who put customers at the heart of their business are the most successful. These days, responding in real time and anticipating needs help ensure the customer has exactly what they need, giving them no reason to look elsewhere. This in turn allows big banks to expand their share of pocket.

In short, retail banks today have a unique opportunity to drive loyalty through proactive engagement, and now is the time to take advantage of it – before fintech disruptors drive a permanent wedge into the market. ■

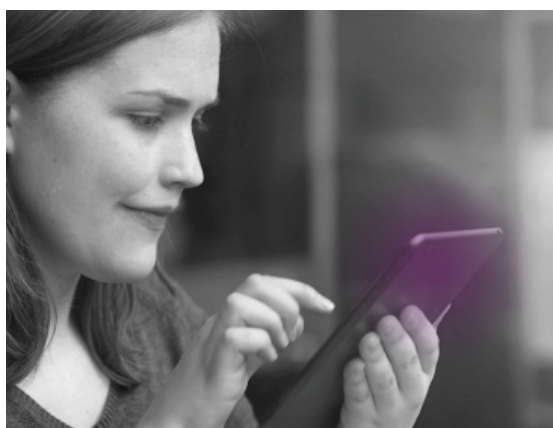
Simple, secure and effortless digital solutions for financial services organisations



To find out more please visit:

www.intelligentenvironments.com

 **@IntelEnviro**



Intelligent Environments is an international provider of innovative financial services technology. Our mission is to enable our clients to deliver a simple, secure and effortless digital customer experience.

We do this through Interact®, our digital financial services platform, which enables secure customer acquisition, onboarding, engagement, transactions and servicing across any digital channel and device. Today these are predominantly focused on smartphones, PCs and tablets. However Interact® will support other devices, if and when they become mainstream.

We provide a more viable option to internally developed technology, enabling our clients with a fast route to market whilst providing the expertise to manage the complexity of multiple channels, devices and operating systems. Interact® is a continuously evolving digital customer engagement platform that ensures our clients keep pace with the fast moving digital landscape.

We are immensely proud of our achievements, in relation to our innovation, our thought leadership, our industrywide recognition, our demonstrable product differentiation, the diversity of our client base, and the calibre of our partners.

For many years we have been the digital heart of a diverse range of financial services providers including Generali Worldwide, HRG, Ikano Retail Finance, Lloyds Banking Group, MotoNovo Finance, Think Money Group and Toyota Financial Services.



The Digital Banking Club

POWERED BY  intelligent environments

Intelligent Environments,
the international provider
of digital financial services
solutions in association with
Retail Banker International,
Cards International, Electronic
Payments International, Private
Banker International, and
Motor Finance publications



Join thousands of financial
services professionals who
have joined **The Digital
Banking Club** to understand
the future of mobile and online
financial services

Join The Club!

www.thedigitalbankingclub.com



@TheDBclub

Membership is free

For more information please email:
tdbc@intelligentenvironments.com

Membership benefits

10% discount for new subscribers/purchasers on:

Annual subscriptions to Retail Banker International, Cards International, Electronic Payments International

World Market Intelligence's archive of over 250 Retail Banking and Cards & Payments research reports

Subscription to the Retail Banking and Cards International Intelligence Centres