www.financialit.net • November 2019 • Special RBR Branch Transformation Issue

Financial IT

Innovations in FinTech

BRANCH TRANSFORMATION: WHAT IS IT?

Linda Chamberlain,
Marketing Manager UK & Ireland,
Cennox
Leon Ashley,
Hardware Consultant,
Cennox

DIGITAL ADOPTION: DO OR DIE...

Janice Diner,
CEO and Founder,
Horizn

THE BRANCH IS DEAD, LONG LIVE THE BRANCH

Adam Crighton,
Senior VP and GM,
NCR

Niccolò Garzelli,
Senior Vice President, Sales, Auriga

HELPING BANKS TO DEVELOP BRANCH BANKING STRATEGIES

OUR DATA COMES DOWN TO TWO SIMPLE THINGS.

WHAT WE DO WITH IT. AND WHAT YOU ACHIEVE WITH IT.

We are Refinitiv - trusted and relied on by over 400,000 professionals in more than 190 countries.

We provide the data, technologies, and expertise our customers and partners need to drive their business forward.

With our open platforms, smarter insights & analytics, and powerful workflow tools, financial professionals can make better business decisions and pursue new opportunities with confidence.

Refinitiv.com

REFINITIV™

DATA IS JUST
THE BEGINNING

SURVEIL-X™

The First AI-Powered True Holistic Surveillance Solution

- Multi-Dimensional Analytics Using Trades & Communications
- Events Reconstructed to Demonstrate True Intent
- Discovers Previously Unknown Risk
- Cloud Agility and Cost Savings
- Provides Full Global Regulatory Coverage

Fighting financial crime.
It's what we do.

NICE · ACTIMIZE

niceactimize.com/compliance

Getting all the answers with just **one question**

WHY DO BANK BRANCHES REALLY MATTER?

Financial IT's archive includes two very different stories about branch banking in the last two months or so.

One story suggests that physical bank branches will disappear completely. In Israel, Pepper (Banking) has set up an entirely mobile bank which enables customers to manage their finances entirely via their smartphone. Customers only pay for the services that they use – including getting a loan. The philosophy is that 'banking should be as fun as Facebook and as easy as WhatsApp.' Unusually, Pepper (Banking) is not a start-up, but an element of Bank Leumi, a long established universal bank. Pepper (Banking) is operated completely separately from that bank and is based on brand new systems.

However, branches may well be here to stay, according to the second story. TSB opened a flagship branch at 55 Bow Bells House, Cheapside, in the City of London in mid-October. Like Pepper (Banking), TSB is looking to put customers at the heart of the banking services that are offered. The new branch has an open-plan layout and offers a mix of self-service options, as well as access to TSB's staff. Customers can use their own devices, or the iPads that are provided, as well as ATMs and immediate deposit machines.

These visions of the future are, at first glance, diametrically opposed to each other. However, there is a consistent message. Customers are paramount. If they see a visit to a branch as being a chore or a cost, they will demand an experience that compensates. If they do not see a visit to a branch as a chore or a cost, branchless banks will have to deliver products and tailored services that are at least as good as those provided by traditional banks with branches.

What is significant about Pepper (Banking)'s approach is that customers can speak with real people at the bank via a video link. All that is missing is the opportunity for an actual handshake. What is significant about TSB's flagship branch is that it is located on one of the busiest high streets in the UK and that it caters to customers who need to deal with physical cash. The branch will be accessed by many customers who do not see a branch visit as an unbearable chore or a cost.

The role that is played by bank branches in a bank's overall business model depends on a complex variety of issues. What are the technologies that are being used? Where are the banks located? What do the bank's employees who work at the branches actually do? Where does physical cash come into the picture? Is the bank looking to promote and distribute products that originate from other, third party, providers? How does the bank calculate the true value of its branch network?

Accurately answering these – and other relevant – questions for a particular bank will tell you a lot about the philosophy and strategy of that bank. Answering the questions for the leading banks in a particular national market will tell you a lot about retail financial services in that country. Crucially, it will provide insights about what the financial services landscape will look like in two-to-five years time.

In short, an understanding of what really matters at the intersection between financial services and IT can be gleaned from just one question: what are the bank branches for? Our good wishes go to all participants at RBR's 10th annual Branch Transformation conference, which takes place in London on 19-20 November 2019.

by Andrew Hutchings,
Editor-In-Chief, Financial IT

Financial IT
Innovations in FinTech

ISSN 2050-9855

Finnet Limited
137 Blackstock Road, London, N4 2JW,
United Kingdom
+44 (0) 208 819 32 53

Founder
Muzaffar Karabaev

Editor-In-Chief
Andrew Hutchings
andrew.hutchings@financialit.net

Publisher
Chris Principe
chris.principe@financialit.net

Project Coordinator, Managing Editor
Katherine Emirosan
kemirosan@financialit.net

Content Editor/Events
Nilyufar Sodikova
nilyufar.sodikova@financialit.net

Content Manager
Aynura Abdurakhmanova
aynura.abdu@financialit.net

Multimedia Editor
Bekhruz Khazratov
bekhruz.khazratov@financialit.net

Production/Design
Timur Urmanov

PASHA Bank
New heights. Together.

We Support. You Expand and Grow. Together We Make an Impact.

Upholding the leader position in the corporate and commercial banking segment over the 10-year period, PASHA Bank seeks to contribute to the development of private businesses and national economic growth.

We have been employing a unique approach prioritizing co-creation principles to cater for specific business needs of customers. Top-notch advisory services of PASHA Bank do not only guarantee reliable and secure funding, but also assist in financial planning and operations to hedge certain risks through prudent investment and market analysis.

PASHA Bank is determined to deliver excellence with the help of expertise and qualified team required for true, sustainable relationship banking that offers higher quality, tailor-made and advanced banking products and services.

emeafinance
EUROPE BANKING AWARDS 2017

BEST BANK AWARD 2018
GLOBAL FINANCE

496 50 00 | www.pashabank.az

Financial IT
Innovations in FinTech

EDITOR'S LETTER

COVER STORY

INNOVATION CORNER

LEAD STORY

INTERVIEW

FEATURED STORY

FinTech CONNECT

@FINTECHCONNECT #FTC19
@FINTECH CONNECT
@FINTECHCONNECT

3-4 December 2019 | ExCeL London

THE UK'S LARGEST FINTECH CONFERENCE & EXHIBITION

Bringing together 6,000 professionals across the full fintech ecosystem:

- Learn from innovators across the 5 stream conference
- Discover 200+ best-in-class fintech innovations
- Meet trailblazing startups & entrepreneurs
- Share best-practice with financial services leaders across digital transformation, paytech, blockchain, regtech & security

MEET THE INCUMBENTS, CHALLENGERS AND DISRUPTORS DRIVING FINTECH FORWARD

Revolut · Google · monzo · CONSENSYS · N26 · checkout.com

Marcus: BY GOLDMAN SACHS · VERACODE · FCA FINANCIAL CONDUCT AUTHORITY · BANK OF ENGLAND · credit karma · STARLING BANK

TransferWise · tide · Atom bank · ticketmaster · BILL & MELINDA GATES foundation · avios · WELLS FARGO

REGISTER TODAY TO SAVE UP TO £180 ON YOUR FULL DELEGATE PASS USE CODE FIN19

VISIT FINTECHCONNECT.COM

Financial IT
Innovations in FinTech

BRANCH TRANSFORMATION: WHAT IS IT?

Linda Chamberlain,
Marketing Manager UK & Ireland,
Cennox.

Leon Ashley,
Hardware Consultant,
Cennox.

'Branch Transformation' encompasses many aspects and means different things to different people.

Some may consider a beautiful new branch design in a bright, airy, inviting, colourful space. Others imagine improving the branch experience from the ground up. How does a customer feel before they enter a branch? What are their experiences in the branch and how do they perceive the customer service once they've left?

From the perspective of high street banks, how can they reduce costs? What will allow them to extend service accessibility? How are they engaging services and driving sustainable growth? A customer should be able to bank whenever they wish, with 24-hour service availability. They should be able to pay in or withdraw cash, deposit a cheque, open a new service and provide proof of identity, all via the latest self-service innovations available in the UK right now.

The design of the branch is viewed as an extension of the wider branding and should be seen as an opportunity to deliver key messages. Is the brand informal, futuristic, traditional, or a combination of all three? Does the bank wish to convey messages or a 'story' of the history of their branch? Is there a defined route to take when a customer enters the branch? Is the signage clear and concise?

The location strategy is also key. Now technology is so advanced, branches are no longer restricted to traditional locations. From a shiny giant 'flagship' open-format, to a portacabin-sized location in a remote area with full banking functionality, anything and everything is possible.

In 2019, we have the ability to completely change the customer experience by providing seamless integration of mobile/internet banking and the branch. A customer who has started their loan application online may need some support, and can head to the branch. They can be identified upon entry, whether they are expected or not. From the branch perspective, the staff will know who has entered the branch, and they will have access to their customer profile. They will then be ready to help that customer before even saying 'hello'. They should easily be able to follow up on visits and events by tracking customer movements and paperless transactions. There are various nuts and bolts to these implementations that are often overlooked or siloed, missing key opportunities to create a seamless experience, and, ultimately, save costs.

Functionality

As a minimum, banks should have their cash management processes fully integrated at both software and hardware levels. Any points of entry for cash – whether CIT, over-counter or customer deposit in self-service – should automatically bring that cash into the branch ecosystem. This gives flexibility to provide fitness-sorted cash on demand throughout the branch and the efficient removal of non-fit cash from circulation. Long gone are the days where it is still necessary to keep ATM cash separate from the teller and the back office. Banks should be empowered to remotely manage

branch cash levels and automate cash management. Staff should not be burdened with having to manually handle, count and secure cash. This would mean they can focus on the real value-add services; advising on loans, insurance, mortgages while delivering first-class customer service. Branches should no longer have to pay for perfectly good cash to be collected and new notes to be delivered, sometimes in the same day and to different locations within the same branch.

The 'Machines of the future' which fall in line with 'Branch Transformation solutions' will perform many tasks currently performed by retail banking staff. Deploying more of these machines will help give staff more time to engage with customers and offer the personal touch.

Software

Often when a business offers a 'cloud-based' service, particularly in the payments industry, it means a legacy monolithic application in a traditionally hosted service; a model that does not offer the real benefits of cloud technology.

A solution is to use state-of-the-art cloud technology and tools that inherit all the real benefits of cloud architecture; lower costs, better security, elastic scalability, agility, portability, and high availability of service, none of which are truly achievable with monolithic alternatives.

These reliable solutions will enhance operations for the future branches, creating an altogether immersive customer journey.

When a bank believes in a ground-up approach to real Branch Transformation, optimising its hardware and software, freeing up tellers to engage with customers, staying open for longer, whilst looking inviting and oozing innovation, this is the future of banking. This is Branch Transformation.

Cennox

Cennox supports the world's leading brands to deliver their complex projects. It thirves in demonstrating real end-to-end solutions, tailor-made to meet the needs of its clients. From nationwide installation services and technical hardware provision, to implementing security solutions, signage projects and branch transformation, Cennox improves its client's project cost efficiencies, provides choice and delivers products and ongoing services to enhance the operations of their businesses.

Financial IT
Innovations in FinTech

HELPING BANKS TO DEVELOP BRANCH BANKING STRATEGIES

Interview with Niccolò Garzelli, Senior Vice President, Sales at Auriga

Auriga is a leading supplier of software and technological solutions for the banking and payments industries, and a specialist provider of innovative omnichannel solutions to banks and other financial institutions. Its solutions, deployed on over 70% of Italian ATMs, are founded on modern architecture and improve time to market for new services while lowering costs and building long-term competitive advantage. Auriga is a global company, with a dedicated presence in Eastern and Western Europe and expanding operations in the UK.

Financial IT: What is the Unique Selling Proposition of Auriga for banks?

Niccolò Garzelli: Auriga has been specializing in delivering cloud-centric software solutions for the banking and payments industries for 27 years. We are a vendor-independent technology provider with a smart ATM approach powered by cloud-architecture – we combine device development with host development. This means we can offer advantages in terms of integration, help banks tackle security challenges and provide the chance to reduce costs and time-to-market. Our proprietary omnichannel banking software suite, WinWebServer (WWS), can be integrated with legacy solutions to assist financial institutions in exploiting data and accelerating strategic business decisions. We offer banks a web-based architecture that enables them to deliver a seamless experience for their customers across channels including self-service, internet and mobile banking.

Financial IT: What is the main business/ product line that provides the highest revenue?

Niccolò Garzelli: We offer self-service products, ranging from ATMs to assisted-self service devices to kiosks. We are built on the principle that self-service banking provides a better experience through the cloud, which is something our industry is now acknowledging: it's therefore unsurprising that this part of the business is doing so well. We expect more banks to take advantage of this in future as the principle delivers banks so many benefits – improved customer experience, reduction in IT costs, better integration with other channels and non-banking services and more.

Financial IT: What is the latest news from Auriga?

Niccolò Garzelli: Auriga has introduced a new component of WinWebServer, WWS AI, to enable banks to leverage

Niccolò Garzelli,
Senior Vice President,
Sales,
Auriga

existing data in order to boost customer experience. The solution utilizes machine learning algorithms and time series analysis, in order to assess transaction data and predict cash withdrawal/ deposit trends. It can help in optimising cash flows in bank branches, cashpoints and vaults considering peak periods, holidays and other factors. Furthermore, it uses Bayesian algorithms and logistic regression to predict churn rate and customer satisfaction levels. The module can also help the banks in automating internal processes and reducing errors.

Auriga's latest technology allows interactions with all the banks' touch points and cash points to produce valuable data sets on potential and current customers, which can be used to collect more detailed information on their satisfaction, behaviour, and concerns – enabling banks to create more bespoke customer journeys.

Financial IT: What are the changes and developments that have taken place since the beginning of 2019 in the UK retail banking space?

Niccolò Garzelli: We've continued to see bank branches across the UK close, one of the most recent announcements being that both Lloyds Bank and Santander's Plymouth city center branches will close by the end of the year. *Which* has found that 1,080 bank branches closed between 2018 and 2019. It has also found that access to ATMs has been falling – around 250 free-to-use cash machines are disappearing each month – leaving consumers miles from cash in many rural areas.

Moreover, with banks such as Lloyds Bank turning locations into 'micro-branches' that do not accept coins, access to cash is falling as noted by the Treasury Committee's Consumer Access to Financial Services report published in May.

However, in July, Barclays announced that it would be turning its branch in Pickering, Yorkshire into the first of ten pilot 'community branches', extending opening hours to Saturdays and reinstating local branch managers. It has also opened 'business banking hubs' designed to provide more convenient cash services. Other key trends we are seeing include the increasing use of white label ATMs – ATMs owned and operated by non-banking organisations or more than one bank. This strategy offers a way for banks to drive efficiencies by consolidating ATMs, sharing them with other organisations to save money but retain convenience of location for customers.

We are also observing ATM 'externalisation', also known as outsourcing, whereby an ATM is fully managed by a third-party provider to reduce costs while maintaining consumer access to a bank's services. Although outsourcing could mean the bank being charged a fee each time the ATM is used, this is usually worthwhile, given that hardware upkeep and replacement can be expensive.

Financial IT: Why do banks need to accelerate the digital transition? What are the areas of major investments?

Niccolò Garzelli: Banking technology can improve so much of the way we access financial services. Consumer expectations are evolving constantly, our population is rapidly aging and in our globally connected world money needs to flow more easily than ever before, no matter where it is going to or coming from. The next generation needs to ensure it meets these challenges, and whatever comes after. Central to this is having the technology to adapt and grow as the world changes. Banks can't be restricted by out of date, vendor-dependent technology – they should invest in vendors who can identify these changes and help them define next steps. Challenger banks were built on a clean technological slate, but existing banks can get the same benefits by choosing a vendor-independent platform.

Financial IT: What's your forecast for the coming year? How will traditional banks change in the future?

Niccolò Garzelli: We expect to see banks continue closing down bank branches and ATMs. However, we also expect them to do more to enhance digital experience and protect access to cash and financial services with technological investment, and by trialling alternative branch formats.

Financial IT: Please comment on how Artificial Intelligence (AI) is likely to affect retail banking over the next five years?

Niccolò Garzelli: AI will allow banks to focus on their customers by leveraging data they own to gain essential insights. This will in turn allow banks to personalise and enhance the customer journey, making it as frictionless as possible, by manipulating the data to offer real-time recommendations. We predict that AI will be deployed by more banks over the next five years to help with a whole host of activities including automatically classifying payments. There will also be chatbots providing relevant, useful financial advice to customers based on payment history – and ultimately offering a better service to drive customer retention and sales.

Financial IT: Auriga is a sponsor of the RBR Branch Transformation event. What are your expectations from the conference? What are you showcasing this year?

Niccolò Garzelli: We are really looking forward to meeting banking industry professionals, finding out what keeps them up at night and how technology such as ours can help them solve the current issues they are facing, as well as potential challenges they may face in future. We will be showcasing our WWS Branch solution aimed at renewing the digital offer and enhancing the strengths of the branch from a customer-centric perspective. We'll show how it allows banks to put the customer at the center of their strategy and – thanks to AI which enables the support and automation of internal processes – automates transactions. That, in turn, reduces errors, speeds up results and improves customer service.

We want to help visitors at the Branch Transformation event to better understand customer behaviour, in order to help banks to create loyalty programs and incentives to maintain high levels of customer retention. This can be done by offering new and personalised services that suit their needs, based on the data collected on new and existing customers. Auriga aims to help banks to exploit predictive analysis and make effective use of data from branches, channels, and customers, which will ultimately help them to make better business decisions.

THE # NEXTGENBANK®

powered by us, shaped by you

Flexible and advanced software modules that can easily be added and integrated into the bank environment, so you can start creating your own cutting edge service platform and shape the ideal bank of the future, today.
Innovative tools for a continuous channel performance optimization: in your hands is the power to enhance omnichannel and cross-channel service quality, to control and reduce operational costs, and to offer a tangible new banking experience.
Unique, immediate and tailored for each customer.

AURIGA
the banking e-volution

www.aurigaspa.com

Financial IT
Innovations in FinTech

DIGITAL ADOPTION: DO OR DIE...

Interview with Janice Diner, CEO and Founder of Horizn

Financial IT: Can you tell us a little about Horizn?

Janice Diner: Horizn helps financial institutions get ready for the digital customer in an environment where digital transformation and the rapid launch of innovation are the norms. The award-winning SaaS platform focuses on equipping both frontline employees and customers directly with the knowledge needed to improve the customer experience and dramatically increasing digital adoption across all channels.

Horizn's proprietary technology combines a simulator microlearning methodology with gamified principles and advanced analytics. Horizn helps banks distribute product knowledge to employees, digital ambassadors, with customers in-branch (hip-to-hip), in call centres, directly to customers online (through websites), and in marketing activities.

Financial IT: Can you define digital adoption in banking?

Janice Diner: As financial institutions become increasingly more digital and are pushing innovation, the race to increase digital adoption and improve the customer experience has revved-up. While speed to market remains critical, achieving digital and mobile adoption with customers is setting the leading financial institutions apart. Although simple in theory, most banks are not yet aligned to manage the volume, cadence or depth of knowledge required to support its digital transformation. 'Build it, and they will come' has proven to be a myth across digital capabilities. Our experience also suggests that senior level commitment is essential, as it signals to the organization that becoming a digital bank is not a side-of-the-desk or middle management activity.

Digital adoption in banking means achieving a state in which both your employees and your customers gain the ability to use digital assets and tools as they are meant to be used and to their fullest extent. When your employees and customers increase digital fluency, they not only learn and use the basic functions of your digital assets, but maximize the use of multiple digital tools and product features.

Financial IT: Is your frontline digitally-savvy and ready to answer your customers' mobile and digital banking questions?

Janice Diner: Underpinning digital transformation is organizational readiness. This refers equally to employee readiness, customer readiness, and technology readiness. These three have to move together. If digital innovation is not being surfaced to your employees or if they aren't properly trained or positioned to be confident then they will not be comfortable discussing digital innovation with customers.

There are no shortcuts to this. In order to ensure that your frontline (in-branch and contact centres) colleagues are digitally-savvy and ready to talk digital with your customers, they need digital knowledge. Ideally, this knowledge is accessible to employees before your innovation goes to market and available with every new feature and update you are launching.

With the Horizn Employee Platform, you can empower your entire workforce with the knowledge needed to be confident, ready to talk and demo digital features with your customers across all channels. Our In-Branch Digital Demo module is being used to enable hip-to-hip digital demos in-branch with employees and customers on mobile devices, tablets and kiosks.

Financial IT: How do you make your customers aware and help them understand your digital products to help drive digital adoption ?

Janice Diner: Given the rapid pace of innovation, it is critical that transformation puts the customer at the centre of everything. We hear from our global bank clients regularly with similar mission statements such as, "We need to offer a world-class legendary customer experience", "Our mission is to power human potential" or "We wish to embed ourselves in the community and be a relationship bank for their customers".

Banks globally talk about the importance of the customer experience, the omni-channel experience. But when your customers are on your website, can they find information on "how to" use your latest digital technology, are your customers aware of the new features you have just launched in your mobile app, and how are you leveraging your marketing activity to communicate this knowledge to them?

At Horizn we had this early "aha" moment, where we realized we were

Janice Diner,
CEO and Founder of Horizn

Janice Diner is the CEO and Founder of Horizn, an award winning Fintech company that helps financial institutions dramatically accelerate digital adoption. Under Janice's leadership Horizn has won, the Celent Model Bank Award with Royal Bank of Canada, the London Institute of Banking & Finance Financial Innovation Award with Nationwide Building Society and Best of Show at American Banker Digital Banking.

As product evangelist, Janice travels widely, she is a frequent speaker, getting on stage with her clients at the world's most prestigious financial industry events. Janice has been featured in Forbes, Financial Post and Entrepreneur.

Janice is passionate about being a role model for women in technology and is a mentor to the next generation of industry business leaders. She spent her early career in the advertising world blending senior creative leadership with business technology. Janice served as an advisor at the MaRS Discovery District helping early-stage tech companies commercialize, she has served as a board director for SheEO, and has served as a judge for the Cannes Lions Advertising Awards.

teaching humans how to use new innovation. All humans, employees and customers both need to learn and understand the digital products that are being launched in the market. This insight led to the Horizn Customer Direct Platform which distributes product knowledge, enables customers to self-learn new digital banking capabilities as they're released, encouraging faster and more efficient digital adoption. It is mission critical to the customer experience that your customers have the ability to access 24/7 "how-to" learning capabilities.

Financial IT: Tell us a bit about Horizn's platform methodology?

Janice Diner: Horizn's platform methodology combines product simulators, micro-learning, gamification and robust analytics to accelerate digital adoption of your latest innovation, with both customers and employees.

There is an age old Chinese proverb, "I hear and I forget, I see and remember, I do and I understand." Horizn's Product Simulator Methodology is a technology that acts on the lines of this proverb. We help all users, both employees and customers learn digital by experience in real-time in a safe environment that makes digital innovation easier to understand and comfortable to use.

The platform also leverages micro-learning – which is the process of learning through short, digestible content. Complex mobile and digital features are broken down into small, digestible units specific to product features and desired learning behavior. They're easy to learn and they're easy to share with customers.

Our Product Simulators are integrated everywhere so that customers have direct access to learning anywhere, in-branch, with call centres, on bank websites, in mobile apps, and chatbots. Marketing teams are using Product Simulators in SEO, marketing campaigns and in email campaigns direct to customers.

Financial IT: What does success look like for your bank clients?

Janice Diner: At Horizn, our measure of success is client success. Using the Horizn Platform, banks globally increased mobile adoption by 25% and brought call center times down 45 seconds. Banks using our in-branch demo module with non-digital customers, have converted 20% of non-digital customers to mobile banking. With the Horizn Platform, our clients are winning awards like the Celent Model Bank Award with RBC's digital activation strategy and a Financial Innovation Award for Nationwide Building Society from the London Institute of Banking & Finance.

Laura Raus,
Research Analyst,
RBR

IADS SEIZE OPPORTUNITY AS BANKS CUT BACK ON ATM DEPLOYMENT

As the number of ATMs deployed by banks falls, independent ATM deployers (IADs) are expanding their footprint in many countries. RBR's latest research sheds light on this trend to help answer a key question – who will be deploying the terminals that provide us cash access in the future?

IADs have expanded rapidly since the mid-1990s, and have often proved resilient to market changes even as falling usage levels prompt banks to start removing ATMs. Of the 41 countries in which IADs are present, 32 saw a rise in the number of IAD terminals in 2018, according to RBR's Global ATM Market and Forecasts to 2024 report. In South Korea, for example, IADs added 1,400 new ATMs in 2018, often taking over locations previously occupied by banks.

Regulators warming to IADs

IADs' prospects have been supported by increasingly permissive regulations. A growing number of countries allow non-banks to operate ATMs, sometimes as part of efforts to widen financial inclusion. For example, Pakistan has allowed IADs since 2017, and the first non-bank deployer is due to enter the market this year.

In several countries, IADs must partner with a bank to deploy ATMs, but this restriction does not necessarily prevent them from competing successfully. In the USA, IADs make up more than half of the country's ATMs – some of these partner with small regional banks, but have achieved nationwide coverage with their own fleets. In other countries, the lifting of this restriction has given impetus to the nascent IAD sector. As an example, the number of IAD ATMs in Argentina languished for years after the first such terminal was installed in 2010, but grew from just a few to 191 last year after authorities allowed IADs to operate without a bank partner in 2017.

Low costs key to success

It may sound counterintuitive, but IADs – which, by definition, are running ATMs as a business rather than simply as a service channel – are often able to operate in locations that banks do not find profitable. IAD ATMs typically see lower usage levels than bank installations, and yet IADs can make a positive business case because many of their terminals are lower-functionality, lower-cost units than those used by banks.

Moreover, IADs frequently use a "merchant-fill" model, whereby their ATMs in retail premises are restocked by the merchant. This lowers costs for both parties, as cash-in-transit services are not needed to take the merchant's daily earnings away or to refill the ATM. Many IADs have contracts with large retail chains to install ATMs across their stores, and in Japan, the largest IADs are owned by retail groups.

Outsourcing business

IADs often gain business by co-operating with banks, offering ATM services at a lower cost than the banks would be able to achieve in-house.

Banks in some markets have outsourced a part or even all of their off-site ATM operations to IADs. In Canada, IADs are increasingly deploying off-site ATMs on behalf of banks; these terminals carry bank branding, and enable the banks to expand coverage more cost-efficiently than by operating their own non-branch fleets. IAD terminals now account for 70% of Canada's ATMs, the highest such share in the world. Bank-branded IAD ATMs are also common in the USA, which has the world's largest IAD sector.

Not only success stories

There are, however, some markets where IADs have not fared well. The number of IAD ATMs in Mexico has been on a downtrend since 2011, while banks have deployed more terminals. The reason for this is that interbank agreements offering low-cost or free transactions to each other's customers have made surcharging IAD terminals less attractive.

In the world's largest ATM market, China, the number of IAD terminals had fallen to just 2,100 by end-2018, and RBR forecasts that the Chinese IAD sector will disappear altogether in the next few years. Restrictive regulations are partly to blame – Chinese IADs can deploy ATMs only in partnership with a bank, and must gain the regulator's approval for the installation of each terminal.

Will banks give in?

The number of IAD ATMs fell in other markets too. For example in Canada and Australia where IAD ATMs are common, both banks and IADs have reduced their numbers of ATMs as cashless payment methods gain ground, and this trend is likely to continue.

Nevertheless, RBR forecasts that the total number of IAD ATMs worldwide will grow over the next five years, and that IADs will continue gaining market share from banks. As banks increasingly choose to scale back their ATM operations, the collaborative dynamic may come to the fore, with more and more banks viewing IADs as partners rather than competitors. This would enable banks to shift their focus more towards their branches and digital channels, without depriving their customers of ATM cash access.

THE BRANCH IS DEAD, LONG LIVE THE BRANCH

Since the beginning of 2019, national banks in the U.S. have announced plans to close 1,267 bank branches. According to RBR, up to 6,000 branches have closed globally. The main reason for this trend is the falling demand for physical locations as more people switch to self-service banking.

Still, the role of the branch is highly important to financial institutions globally. The chief reason for this is that customers value and expect personal service when they need advice on a big transaction or financial decision. Therefore, in an era of maximum availability and consumer convenience via mobile and online channels, banks should not be asking whether the branch still has a part to play, but how it can complement these new touchpoints and continue to deliver unique, valuable services.

NCR predicted this transformation early on, committing $252 million in R&D in 2018, to provide banking institutions with the best software to meet the changing needs of today's customer.

Banks need to investigate new strategies to engage with their customers and deliver a new, digital-first customer experience. Far from the traditional approach of brick-and-mortar locations and a one-size-fits-all model of marketing services to customers, these new strategies need to combine the best technologies with an understanding of the customers' needs.

We see a wider convergence of digital and physical channels in which modernisation of the physical channel accelerates digital transformation. There will likely be a mix-shift in branch formats where for example the number of flagship branches will decline, but at the same time, express or light branches will make up about 80% of all branches.

The branch is vital in attracting and retaining customers

Across the globe, banks and financial institutions have already started to redefine their branch formats to extend their reach. Self and assisted service is increasing and expanding to include mortgage applications, data form submissions and assisted technology applications. By creating an optimised transactions hub which holds all customer usage data, high street banks can monitor transactions across platforms to build a more thorough picture of customer data and uncover new revenue streams and opportunities to engage with customers.

Digital-only isn't enough for a seamless, connected banking experience. Even with the rise of digital, it's unlikely that in-branch banking will disappear entirely. Customers do need to be able to log in from any device, but should also be able to access their banking from any branch or terminal, and have the same level of service across each. This is especially important as there is a clear connection between branch location and market share. This is something that Mark Welbourne, Head of Retail Delivery and Group Retail Strategy at Nationwide, has observed: "data shows that Nationwide's share of the Current Account market is higher in populations closer to the Nationwide branch network. As this is true for both new business and stock (back book), it would suggest that accessibility to a branch is still an important factor when selecting Nationwide".

Several studies confirm that the branch remains important for consumers, especially for more in-depth and complex banking services. And the branch also is important for the more than 100 million small businesses globally, many of which deal in cash and check payments.

In our view, the branch should change to become an extension of its digital channels. To achieve that, the technology used in branch has to change. Mobile tablets, self- or assisted-service kiosks, and digital signage offer improved ways for staff and customers to interact, and provide access to additional customer transaction profiles that help build a more effective understanding of customer usage patterns, aiding staff in providing the right services to the right people and providing customers with the connected banking experience they expect. This way the branch network of a bank can actually be a point of differentiation.

Leveraging the ATM as trusted channel

Access to cash remains vital for customers, in 2018, 79% of point of sale transactions in Europe were conducted in cash.

In addition to providing this essential customer need, banks can also make use of the ATM as a trusted and high impact marketing channel, attracting new customers and upselling or cross-selling products to existing ones.

Today's ATMs are able to deliver innovative customer services beyond cash withdrawal and deposit. Account opening, servicing instant card issuance, business deposit, assisted service, extended transactions like statement scanning can all be done on a modern ATM. Since launching the NCR SelfServ 80 series in 2017 more than 1,000 banks in 80 countries took the opportunity to modernise their self-service channel to get the most out of their existing footprint and staff by providing rich consumer experience at a lower operational cost.

While the decline of high street banks may be seen by some as a warning sign for the end of traditional retail banking, it is instead an opportunity to re-envision how banks and customers interact. A shift to an optimised branch transformation strategy, complete with updated solutions in cash, device and transaction management not only provides customers with the intuitive experiences they expect in a branch in today's digital banking age, but helps financial institutions blend their physical and digital banking channels, to drive loyalty at a lower cost point and deliver modern, innovative services that strengthen their competitive advantage – all by leveraging their branches.

Adam Crighton,
Senior Vice President and General Manager,
Digital First Self-Service Banking at NCR

Adam is the Senior Vice President and General Manager of Digital First Self-Service Banking. In this role, Adam is responsible for owning the entire P&L for the Self-Service Banking line of business, go-to-market strategy, product pricing, high-level client satisfaction, capital expenditure, press releases and marketing spend, competitive intelligence, guidance on major sales opportunities, and the LoB revenue forecasts.
Adam's position demands involvement in all aspects of the banking industry and as such Adam spends much of his time meeting with customers to understand their strategic priorities, working directly with our sales teams across the globe and liaising with our corporate partners. Adam collaborates closely with key stakeholders across NCR to drive a strong focus on delighting our customers through operational excellence and ensuring quality and innovation across the product and service portfolio.

Financial IT
Innovations in FinTech

THE VALUE OF YOUR EMPTY BRANCHES

Dear customers: You told us that branches are important to you, but you rarely visit one. Now our branches are empty half of the time. What should I do: close them or keep them?

Let's face it. Branch visits continue to decline. But at the same time, surveys have shown that physical locations are valued greatly by customers[1] and the success of branchless banking model has yet to be proven convincingly[2]. Down at the bottom of your heart, you know that branches are vital to the bank and customers. The question is: how do you demonstrate the value of branches even when they are not being utilized?

The value of physical: actual usage vs. potential needs to use

The need to maintain physical presence can be discussed from both the bank's and the customer's perspectives:

(1) Things difficult to do digitally. Not everything can be digitized. Cashless is gaining popularity but until the day nobody has any bills and coins in possession, customers will need a physical way to access the banking system. If you are targeting wealthy clients, many will appreciate those old safe deposit boxes to safekeep their precious family heirlooms.

(2) Things easier done face-to-face, such as conducting financial planning sessions and building customer relationships.

(3) Market presence is important to the reputation of any retail bank. Local presence can be more effective than expensive advertisements. Many digital-only banks maintain flagship branches or cafes for this reason.

(4) The perception of convenience is often found to be the most important factor for customers when choosing a new bank[3]. Some may find it comforting just to know that there is a physical desk to pound in case anything goes wrong.

(5) Regulations may require customers' in-person appearance for certain transactions. Banks may also be required to maintain presence in rural or low-income areas.

Out of the above, (5) is a cost of doing business and will not be discussed here. (1) and (2) are about customers' actual usage of individual branches. These reasons are obvious, and their values can be measured relatively easily. On the other hand, (3) and (4) are well known but difficult to measure because they are about the potential needs to use instead of actual usage. They generate value by increasing customers' mindshare at the network level. It might well be the multiple branches that a customer sees during his daily commute that won the bank his business over competition. What's the contribution of these branches especially if the new account was opened online? The perception of convenience cannot be attributed to any particular branch. They must be assessed at the network level.

The power of network

In many countries there are the "big-4" banks. Why do the big banks always get the lion's share of the market? It's simple: customers prefer banks with a large network. My 2019 paper discussed the science behind network effect[4]. Analysis of U.S. branch deposit data of the past 25 years shows the power of network behind big banks' dominance. The few top banks of any market

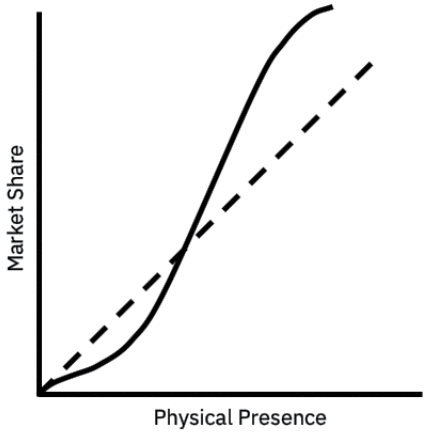
---

[1] A 2017 Raddon study found that 71% of Mobile banking users say branch access is 'very important'.
[2] A 2018 Celent study found that only 6% customers will exclusively bank with digital-only banks.
[3] A 2017 Salesforce survey lists local branch access as the most important factor for customers of all age groups.
[4] Digital versus physical— Finding the right balance to maximize return on investment: Understanding the network effect and the halo effect in banking, Danny Tang. https://www.ibm.com/downloads/cas/G5A5EAVY.

Danny Tang,
IBM Industry Academy Member
Worldwide Front Office Transformation Leader
IBM Global Banking & Financial Markets

Named one of the top 108 financial services influencers to follow by the Financial Brand, Danny Tang is a renowned thought leader in banking transformation. He is an active member of the IBM Industry Academy, the highest achievement for the most eminent industry thought leaders across IBM.
Danny currently leads the Front Office Transformation Solutions for IBM's Global Banking organization. In this role, he advises banks around the world on pressing issues such as digital, mobile, branch banking and other insight-driven transformation in banking.
Prior to his current role, Danny held various leadership positions in IBM, including leading financial services solutions in the Great China Group.
Danny regularly speaks at conferences and events around the world and has authored numerous business and technical articles. He holds an MBA with concentration in finance and operations management from the Anderson School at UCLA. He lives in the San Francisco Bay Area in the U.S.

almost always enjoy a disproportionately larger market share than their physical presence. If we depict the relationship between physical presence and market share on a graph, the result is an S-shaped curve (Figure 1). A bank with 15% physical presence can expect a 22% market share



while a smaller bank with 5% physical presence usually suffers with a share of less than 3%.
Figure 1 Network Effect

The value contribution of branch networks

Note that the physical presence – market share curve represents the average. Performance of a particular bank in a market could be better (above the S-curve) or worse (below the S-curve) than average. If the dot on Figure 2 represents a bank's performance, the market share can be divided into three sections:

(1) The distance between the horizontal axis and the 45-degree line is the market that the individual branches are expected to win through actual customer usage.
(2) The distance between the 45-degree line and the S-curve is the network effect that can be expected given the bank's investment in physical presence. It can be negative if the bank under-invests in physical presence.
(3) The distance between the S-curve and the dot is how much the bank over- or under-performs competition.

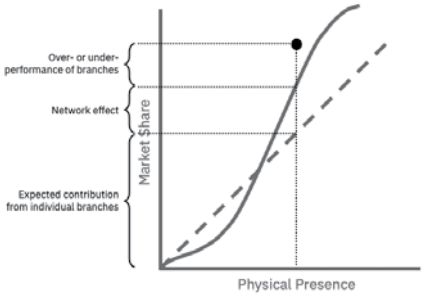


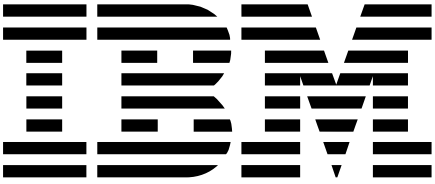
Figure 2 Dissecting the physical presence - market share curve

For example, a fictitious bank in a market has a 20% share while owning 15% of the branches. 20% return on 15% investment sounds pretty good, right? Before you congratulate the bank on a job well done, consider that on average banks with a 15% presence have a market share of 22%, boosted by a 7% network effect. The bank actually under-performs!

Understanding and quantifying the perception of convenience

Few customers visit branches regularly today and even fewer use multiple locations, so the network effect is mostly mental and has little to do with actual usage. Any branch, crowded or empty, adds to the network effect as long as it increases the bank's physical presence.

Customers are changing their behavior. As actual branch usage declines, the perception of convenience will become even more important. Whether optimizing your branch network or justifying its existence, a deep understanding of customers' perception of convenience and the ability to quantify it through the analysis of network effect will be of paramount importance.



Financial IT
Innovations in FinTech

Fiona McNeill,
Principal Product Marketing Manager
Financial Services, Red Hat

THEMES DRIVING DIGITAL TRANSFORMATION AND LEADERSHIP IN FINANCIAL SERVICES

Incumbent banks should know they have to modernize their organization to compete in a world where customers want better and more personalized digital experiences. Eager to realize the cost-savings and increased revenue that can result from micro-targeting products and services, they can adopt next-generation technologies to transform their businesses to lead their market.

Digital leaders are focused on end-to-end customer experiences. Processes, policies, and procedures defined for branch networks are being reimagined to support new digital customer engagement. By modernizing the back office and business processes, banks have an opportunity to streamline, codify, and thereby automate – which, in turn, can reduce friction caused by manual checks and inconsistent policies. This can enable more seamless customer experiences and speedier customer service, with transparency into servicing while reducing operational costs.

Artificial Intelligence (AI) is one of the leading digital technologies that's captured the attention of financial services firms. While a number of use cases have emerged, one at the top of the list is its ability to help detect financial crime.

With increasing stores of event data, banks are challenged to analyze it given the old ways of storing, then analyzing data. Modern technology can help discover and predict anomalies in data without storing it first. Ultimately the goal is to do real-time detection as triage to help minimize the number of false positives investigated.

According to Deloitte , it is the cognitive capabilities associated with machine learning and natural language processing that are expected to make fraud detection models more robust – stronger and more accurate. As described by the Cognitive Computing Consortium, by their very nature cognitive systems can be distinguished from other forms of AI in their ability to adapt and learn from iterative human interaction.

Ultimately, it is the results that matter, reduction in false positives of 95 percent to 50 percent, along with a reduction of 27 percent in manual effort have been cited in a case using modern machine learning techniques – helping discover the undefined unknowns in data. However, it remains to be seen how much better over time these systems will become if AI and cognitive systems come together, with experts who can label data and teach the algorithms iteratively, like that of machine learning techniques in which an algorithm seeks to maximize a value based on rewards received for being right.

We are seeing financial firms marry operational efficiency efforts with AI/machine learning/cognitive computing – creating an additional layer of automated insight that is designed to optimize bank service processing. Part of that optimization can also come from hybrid cloud adoption, in which AI and machine learning models are available to operational systems in the data center and/or in a public cloud.

Native cloud adoption can include the use of Linux containers containing the libraries, dependencies, and files teams need, and these containers can be spun up and down on-demand. Just imagine: analysts can define the rules that automatically execute business decisions, informed by insights from embedded algorithms. Those algorithms, in turn, are part of the pre-approved library defined by AI and domain experts. All of this could be from a self-service environment that doesn't require your technology organization to spend time provisioning the tools, the data, or the processing capacity.

Of course, bringing these kinds of capabilities into new products beyond operations is within the realm of open banking. More banks seem to be realizing the value of co-creating products and services to expand their market reach to help them achieve new value streams. Combining back office operational efficiency and embedded intelligence with data sharing via open banking APIs should further propel digital leadership in financial services.

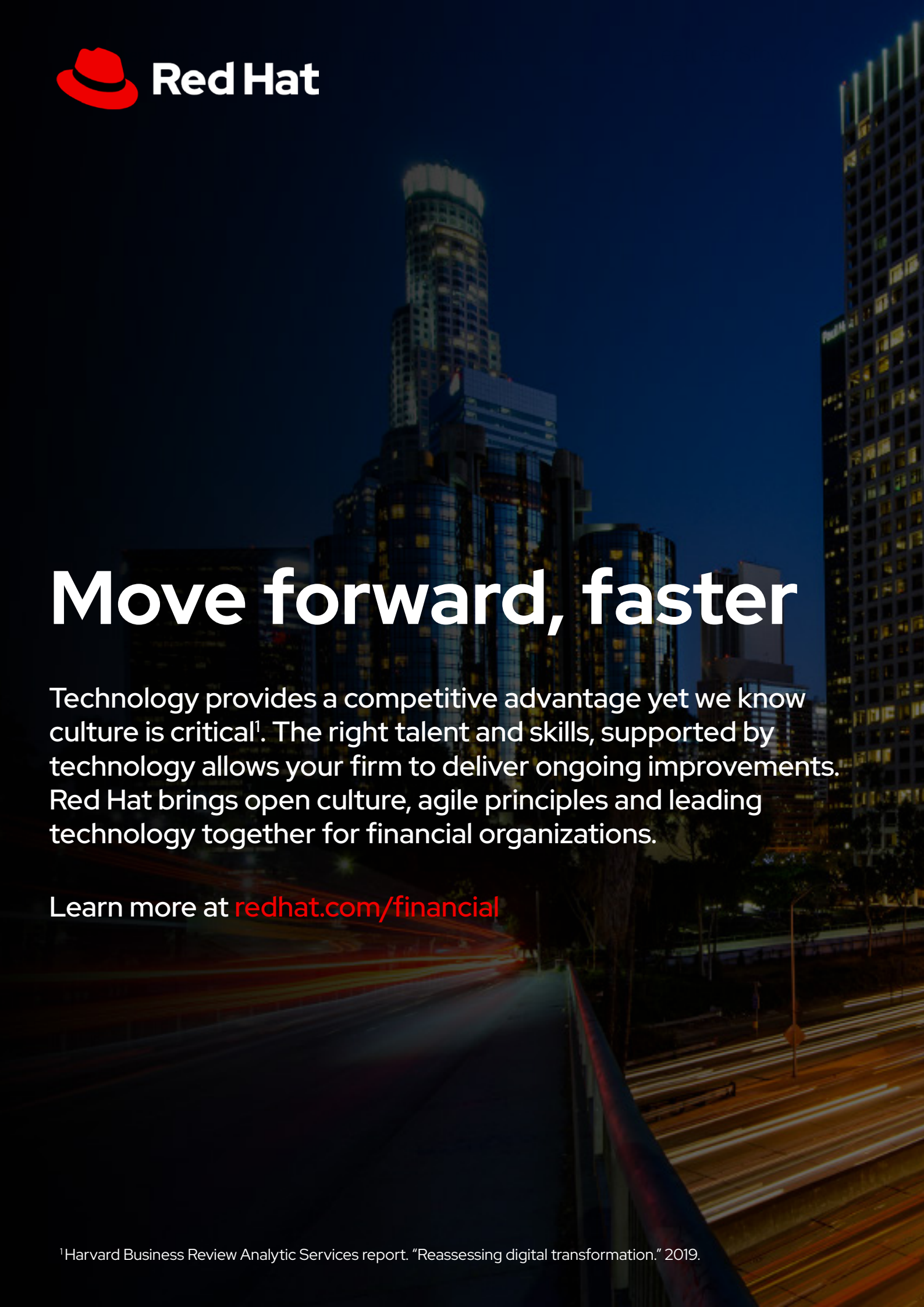
These technologies hold much promise, and banks should understand they need to rethink their technology investments to include them. But knowing what they need to do and figuring out how to do it can be two different things. Banks will have to be sure to aim and hit the digital high points that best fit with their long-term business plans aligned to customer journeys at the core. Today's dynamic customer environment should only continue, with new entrants and new ways of providing banking services. Perhaps the most prudent strategy is to plan for change.

These technologies have one thing in common. A successful return on technology environments that are mutable to business needs often depend on a willingness by the firm (and its leaders) to accept the cultural, process, and policy metamorphosis necessary to make them – and the larger digital transformations they can facilitate – work. This is a culture change for a traditional long-standing industry.

It's going to be challenging to digitally transform banks, yet a path must be chosen and navigated, all while the banking landscape continues to change.

---

[1] https://www2.deloitte.com/content/dam/Deloitte/us/Documents/audit/us-ai-risk-powers-performance.pdf


Red Hat
Move forward, faster
Technology provides a competitive advantage yet we know culture is critical[1]. The right talent and skills, supported by technology allows your firm to deliver ongoing improvements. Red Hat brings open culture, agile principles and leading technology together for financial organizations.
Learn more at redhat.com/financial
[1]Harvard Business Review Analytic Services report. "Reassessing digital transformation." 2019.

Scott Mullins,
Head of Worldwide Financial Services
Business Development,
Amazon Web Services (AWS)

Scott Mullins is responsible for leading the development and execution of AWS's strategic initiatives in the financial services industry around the world. Prior to joining AWS in 2014, Scott's 20-year career in financial services included roles at JPMorgan Chase, Nasdaq, Merrill Lynch, and Penson Worldwide. At Nasdaq, Scott was responsible for global business and product strategy and a co-founder of the FinQloud platform. Before joining NASDAQ, Scott ran Surveillance and Trading Compliance for one of the nation's largest clearing broker-dealers, with responsibility for regulatory response, emerging regulatory initiatives, and compliance matters related to the firm's trading and execution services divisions. Prior to his roles in regulatory compliance, Scott spent 10 years as an equity trader.

THE CLOUD – THE GREAT LEVELLER

An interview with Scott Mullins, Head of Worldwide Financial Services Business Development at Amazon Web Services (AWS)

Financial IT: Can you tell us more about the career path that brought you to joining AWS?

Scott Mullins: I started my career as an equity trader at a regional broker-dealer in Dallas, Texas in 1998. My timing was not particularly good, as the trading landscape began to change significantly shortly thereafter. No sooner was I sitting at a trading desk than we went from trading in fractions to trading in decimals in the US. This meant a compression in margins. Then we had to adapt to a new regulation, the new National Market System (NMS), which required broker-dealers to send orders to different exchanges in order to find the best prices.

All this was happening in the context of machines taking on more and more of the responsibilities of human traders. Many of the people who began to move into trading had computer science backgrounds, and were building algorithms to make trades happen where people once did. As this part of the industry changed, I pivoted in my career to a role in regulatory compliance. I had the right background from school where I was pre-law, and was able to couple that interest with my experience and licenses from being a trader to chart a new course in my career. The new role was a natural fit. I ran trade surveillance and regulatory programs and initiatives for a large firm. Technology was central to what I was doing.

In 2012, I joined Nasdaq where I was responsible for the Nasdaq trade reporting facility (TRF) and the post trade risk management services. Subsequently, I was asked to be a product owner and to build a new cloud-based service for Nasdaq. Crucially we had realised that it would cost far too much to buy the infrastructure and run it in our own data centers for this new product. This episode gave me my first taste of the cost-efficiency and scalability of the cloud. It was also the first time that I worked closely with AWS.

This path has led me to be at AWS today. Technology has played a key role in every step on the way. In compliance, for instance, it was very useful to be able to apply analytics to data in KYC and AML monitoring.

Financial IT: How can Fintechs and banks tackle scalability and security using the cloud in a highly regulated industry?

Scott Mullins: Well, I think the wonderful thing about cloud is that it is a really great leveller. It provides the same access to enterprise-grade technology– regardless of the size of the company or the industry in which it operates. In financial services, the establishment of a new business 20 years ago needed a lot of capital – even to test a particular commercial idea. Today, the cloud gives low cost access to pretty much all the services and solutions that you could need. For start-ups in this industry, this also means that they have access to the same security and scalability that is available to the largest and most established financial institutions.

Financial IT: What are the features that make AWS unique compared to other cloud platforms?

Scott Mullins: I think what makes us unique is the way that we operate, the breadth of our features, services, and functionality. At Amazon Web Services, we provide services that help our customers solve specific problems. We learn about a customer's problem and then bring to market a service that can help solve those problems.

We also stand out for our pace of innovation. Last year we rolled out 1,957 new features. If you look at our roadmap of how we build our services, you will see that 90% of that is driven by our conversations with customers around what problems they have and how we can help solve them faster.

I would also highlight the breadth and depth of the services that we offer: you name it – storage, networking, machine learning, we have helped our customers solve problems across every industry and our security solutions, for example, are as relevant to the smallest start-up as they are to the largest bank.

Financial IT: What is next for AWS?

Scott Mullins: We will continue to work backwards from customers' problems. We think that in the near future, focus areas for our customers will include machine learning and more advanced analytics. However, those things are difficult unless data is properly organized. Most businesses tend to have legacy issues – with data stored in different places around the firm. That's why we recently launched a service called AWS Lake Formation, which helps customers to build data lakes in a sensible way, allowing them to break down data silos and leverage analytics to gain insights to help inform their business decisions.

Further, some of our customers are looking to take machine learning from the early stages of experimentation to practical use cases. For this, we have a service called Amazon SageMaker, which provides every developer and data scientist with the ability to build, train, and deploy machine learning models quickly. In other words, if you want to train machine learning models, you don't need teams of data scientists any more. Amazon SageMaker will do the training for you. This is something that we're very excited about.

Also, I'm very excited about the fact that we've got customers who are leveraging our Amazon Quantum Ledger Database (QLDB) and Amazon Managed Blockchain services. Both are services where enterprises can work with popular blockchain protocols like Hyperledger or Etherium, enabling them to manage business transactions that require full auditability.

Financial IT
Innovations in FinTech

THE SHIFT TO SWIFT ISO 20022 XML FORMATS

MAKING LIFE EASIER FOR THE BANKS

Interview with Dirk Vesper, Vice President Product Development, valantic.

Financial IT: Dirk, please briefly describe valantic.

Dirk Vesper: valantic Financial Services Automation is a business unit of the global valantic Group, a worldwide leading supplier of software solutions in areas such as Electronic Trading, Payment and Transactions. valantic supports leading banks and financial institutions with standardised or customised solutions in the field of digitalisation, open banking, automation and the simplification of business operations. In addition to the development of banking solutions, valantic is experienced in consulting and implementation for the financial services industry.

Financial IT: Please simply explain the change that is happening between now and November. It appears that SWIFT MT formats in messages are being replaced with ISO 20022 XML formats. Is that correct? What is the problem this change is trying to solve?

Dirk Vesper: In November 2019, additional ISO 20022 based workflows are being added to the existing ones for SEPA payments. The new workflows will cover investigations in relation to SEPA payments such as non-receipt claims or value date changes. They were not part of the SEPA rulebook before. In November 2021, more market infrastructure will migrate to ISO 20022: high-value payments and payments settled by correspondent banks ("SWIFT payments") will also be processed using ISO 20022 instruments. SWIFT will support a transitional period to 2026, during which banks may continue to send traditional MT messages.

Financial IT: Please explain FinCASE for Investigations. Is it primarily software for resolving demands, complaints and errors in cross-border payments?

Dirk Vesper: FinCASE is a multi-purpose case management application which is optimised to process queries and investigations in relation to financial transactions. The majority of our clients use it primarily for the investigation of cross-border payments because cross-border payments have the highest rate of post-settlement queries. FinCASE is also used for investigations

Dirk Vesper,
Vice President Product Development, valantic

for other instruments such as SEPA payments. With the introduction of the above mentioned ISO 20022 SEPA investigations workflows, we expect an increasing usage of FinCASE in the SEPA area.

Financial IT: What is the Unique Selling Point of FinCASE for Investigations? Are there any or many competing products from other software companies?

Dirk Vesper: Banks often have investigation functionalities within their core banking systems, AML, embargo or fraud applications and/or nostro reconciliation applications. Whereas these are isolated and non-standard investigation applications, FinCASE allows banks to centrally manage all kinds of queries and investigations and get a complete view of any transactional incident happening. FinCASE supports a standard investigation process and allows a full end-to-end automation of the process with a complete link to customer channels. As client channels are directly connected to FinCASE, the bank is able to provide an optimal service to their customers. FinCASE supports all kinds of investigations and transactions such as SWIFT MT, ISO 20022 as well as domestic instruments.

Financial IT: Why does the movement from SWIFT MT to ISO 20022 XML formats matter, given that FinCASE for Investigations can handle the latter?

Dirk Vesper: The ISO 20022 instruments are designed for electronic processing while traditional SWIFT MT standards are coming from the age of manual processing. ISO 20022 based instruments cannot be handled manually anymore because the data structure is very rich and complex. Besides the complexity of the messages, the regulators define rulebooks a bank needs to follow. The rulebooks mandate specific workflows and the usage of ISO 20022 instruments. Customers using FinCASE do not need to care about this. The complexity of messages and workflows is hidden to users and managed by the application. FinCASE allows the highest possible degree of automation according to the rulebooks. Any annual updates to the rulebook are part of the product, which is something that takes a major load away from banks.

Financial IT: What is the SWIFT GPI initiative's implication on FinCASE for Investigations?

Dirk Vesper: The GPI functionality in FinCASE is mainly related to the Stop and Recall-Service: FinCASE supports the communication with trackers and automatically involves communication with SWIFT Tracker, provided that the bank receiving the message is a GPI member. FinCASE also takes care of the GPI rulebook, including special formatted messages.

Financial IT
Innovations in FinTech

RUSSIA'S REMOTE BANKING: AHEAD OF THE GAME

The word "bank" comes from the Italian "banco" meaning a bench on which Italian merchants used to lay out coins in the Renaissance era. The Industrial Revolution turned benches into branches, and now the digital era is bringing its own radical changes into the way people bank.

With online and mobile banking on the rise (61% of consumers perform routine banking transactions via digital channels), Russian customers perceive these services as an integral part of their daily banking experience. In fact, the Russian market has been recognised as one of the top five leaders of digital banking in Europe, according to a new Deloitte and ID Finance report. The continued digitalization of financial services is an overall trend that all key players are following.

Current state of remote banking

The digitalization of the Russian financial industry began in the late 1990s and the early 2000s as more and more people had access to the world wide web in their homes. Users were offered simple banking interfaces to check their balance and transaction history, make transfers, etc.

Fast forward to 2019, and, according to a recent survey conducted by the Russian Public Opinion Research Center, banking is the most popular online service used by Russian consumers with access to the internet. 61% of respondents said they mainly use digital channels for making payments and transfers, 12% use both digital channels and bank branches, and only 9% of consumers surveyed regularly visit the branch for their day-to-day banking needs.

The number of digital banking consumers is expected to grow. Some 23 banks surveyed by Kommersant newspaper reported an average increase of 1.5-2 times in the number of digital-oriented customers, while some banks saw a ten-fold expansion. All respondents noted that mobile app is the most popular way of remotely accessing their services.

The vastness of Russia and its lack of legacy IT infrastructure means that financial institutions are able to cover large territories with their modern full-cycle remote services: from issuing new cards through mobile apps to instant P2P payments using only phone numbers, and online chat support available 24/7. These services are in high demand: a 2018 survey by the Central Bank of Russia showed that almost 60% of the country's adult population has access to digital banking, with the majority managing their money via mobile devices. This lack of legacy banking infrastructure has enabled Russian banks to be more flexible in their product offerings, quickly reacting to market trends and providing new convenient remote banking features to their customers.

What about the branch?

As many other markets, Russia is experiencing bank branch transformation. The Central Bank's data shows that 3,500 branches closed their doors in 2018, which brought the total number to just below 30,000. This trend emerged back in 2014 and, since then, banks across the country have closed over 13,000 physical branches. It is expected that this tendency will continue with 15-20% more branches potentially eliminated in the future. However, the decline in branch numbers can be partly attributed to the Russian Central Bank strategy of consolidating the country's financial space by revoking licences from FIs that are at risk of failure or do not comply with the regulator's standards. Since 2013, 400+ banks have had their licences revoked by the regulator while only a handful of new banks have emerged.

Branches are unlikely to completely disappear. Nevertheless, the shift towards digital banking has triggered changes in the way customers are served in them. For example, flagship branches of one of the country's largest banks are being transformed to allow more space for one-to-one consultations, while the number of self-service terminals that allow cash deposit and withdrawal, transfers, utility payments and much more is increasing.

What's next?

While more and more financial institutions expand their digital portfolio and repurpose their branches, it is clear that digital banking is not just a way of quickly checking an account balance or making a payment anymore. It is becoming a full-scale customer service tool, with customers able to open and close accounts, issue cards and statements, submit claims and complaints and perform other operations from any device wherever they are.

Alexey Osipov,
EVP & CRD Managing Director,
Compass Plus

Financial IT
Innovations in FinTech

BANKING WHICH IS INTELLIGENT, SUSTAINABLE AND DIGITAL

There has always been a close link between banking and technology. When compared with many other industries, banking has always been peculiarly reliant on storing and processing information. Banking has been intrinsically tied to the capabilities of the technology used to underpin the required business capabilities. Banking has always taken advantage of new technologies as they arise, and conversely, changes in the sector are driven by the introduction of new technologies which enable different ways of doing business.

The idea of digital banking is hardly new, with many of the initiatives which are being pursued by banks falling within this topic. In broad terms, digital banking refers to the ability of a bank to acquire and serve customers over all channels, electronic and human, and to be able to manufacture and process new products and offerings quickly and efficiently. The details of how banks have interpreted this mission has varied over time. It is also partly dependent on the type of customer the bank serves and the geography in which it operates. What has become clear though, is that for most banks becoming digital is not an end destination, but is instead part of a journey.

Many of the early attempts to define digital banking were based around digital channels and have become superseded by broader and more holistic programs of customer engagement - and agile and personalised product manufacturing. This is where the concept of intelligent technology is now becoming more critical. Artificial Intelligence (AI) is a prevalent topic in the technology sector at the moment, and this is particularly true of the banking industry. Within this, there are areas of earlier adoption, such as:

- Operational Efficiency
- Customer Engagement
- Personalisation
- Credit Decisioning
- Fraud Detection
- Robo-Advisor capabilities in the Wealth Management sector

Early attempts at AI introduction were focussed on increasing the level of automation, and hence operational efficiency, in largely back-office processing areas. AI is the same technology which is used to solve problems and queries in a helpdesk context. It is redeployed to reduce the number of human interventions needed to process exceptions in a Straight Through Processing (STP) environment. Examples would include attempting to repair transactions in a payment queue where some information is missing or truncated.

As AI decisions become more complex and widespread there has been more discussion about how to audit, or explain, how the results have been arrived at. This is particularly true for decisions that have a direct impact on customers. As an example, the use of AI in making credit decisions can have a direct impact not only on customer satisfaction if credit is declined, but also on the bank's ability to offer an alternative product to the customer since, without knowing why the credit was declined, it will be unable to

Nicholas Brewer,
Product Marketing Director, Temenos

Nicholas Brewer is the Product Marketing Director for Temenos, and is focussed on understanding how banks can use the new technology innovations which Temenos bring to market. He has spent over 25 years in the banking technology industry, concentrating mainly on the future direction of banking and technology and in helping banks to see how they can gain competitive advantage by adopting new technology and solutions.

automatically propose a suitable product for which the customer will be guaranteed to be eligible. Scenarios such as this are leading to an increased focus on Explainable Artificial Intelligence (AIX). This sets out to accomplish very much what its name suggests – automatically made decisions which can be explained in human-comprehensible terms. This becomes important not only for customer-related interactions, such as the one given in the above example but also for decisions and ratings which have a regulatory impact.

The introduction of intelligent technology is fast-moving, with banks seeking competitive advantage from implementing it quickly in areas where it can be most effective. However, one of the lessons from the earlier stages of the digital banking is that, although immediate advantage can be gained from the swift introduction of new technologies, banks are engaged in an industry where battles are often won and lost over more extended periods. Although it is vital to embrace innovation, it is also necessary to ensure that it is used in a way which is sustainable in technology and business terms.

What, then, makes new technology sustainable for a business? The main criteria is that the technology can continue to be improved and upgraded without requiring wholesale replacement or re-implementation every few years. What is innovatory today, can rapidly become out of date, and the pace of innovation continues to quicken. Many of the newer approaches to technology, such as containerisation and micro-services can help with this, particularly when allied to modern DevOps processes. In this case, the use of new technology and modern technology management processes mean that even complex systems can continue to be upgraded frequently without there being a large and negative impact on ongoing business usage. It is important not just to adopt new functional capabilities, but also to embrace the new ways in which technology is developed, tested, deployed and upgraded continuously. This is an approach banks need to implement internally, but also with their strategic technology suppliers and partners.

In parallel, to ensure that the technology is sustainable, it is also crucial that banks can make the best use of the new technology capabilities which they acquire. It is important not to see staff training and skill growth as a one-off event when new technology is introduced, but to develop practical training and support programs, often using self-study and technology-enabled approaches. As with the underlying banking technology, it is also vital that the content is maintained and updated as the bank's policies, strategies and technical capabilities continue to develop.

Digital Banking is, then, a long term journey upon which almost all bank are engaged. In seeking to stay ahead of the competition, it is important to see how new technology can be leveraged, as is happening rapidly with AI and AIX at the moment. However, longer-term success must also be built on the foundation of maintained and upgradeable technology as well as ongoing training and education programs within the bank.

Send and receive money instantly with *OlePay*, a secure and simple payment solution.

Available on the App Store

ANDROID APP ON Google play

www.olepay.com
info@olepay.com

SATELLITE OFFICES | LOS ANGELES - LAS VEGAS - NEW YORK - LONDON - BANGKOK - MANILA

FAR MORE THAN JUST A PISP

Interview with Brian Hanrahan, COO at Sentenial, Nuapay

Financial IT: Can you please provide us an overview of Nuapay?

Brian Hanrahan: Nuapay is a specialist payment processor focused on everything in the non-card space – or "Account-2-Account" payments as we like to call it. This includes standard credit transfers, direct debits and, increasingly, Open Banking payments.

Open Banking has significant potential to disrupt the current payments landscape. That means everything from current transaction methods to the way users engage with payments, in both C2B and B2B markets. We are actively investing in our Open Banking capabilities so as to continue pioneering the Account 2 Account market.

Financial IT: What is your Unique Selling Proposition?

Brian Hanrahan: Nuapay is a licenced Payment Initiative Service Provider (PISP). But of course, a PISP is just a single capability – just one of many capabilities that is needed if you are to give merchants or corporates a functioning payment method.

Many of our competitors are focused on being solely PISPs. They can initiate a payment from your account, but they can't do other payment types like refunds or recurring payments, nor can they give merchants a full reconciliation of their payments.

Nuapay set out to combine our PISP capabilities with all of our other functionality, including direct debits, payment accounts, outgoing payments. This means we can give merchants a full stack Open Banking payment method. This is unique, and not something that many of our competitors are licenced to do – let alone deliver on.

In addition to this, we are one of the leading players in API-enabled payments. We built our first payment APIs back in 2012, and all of our payment products have been

Nuapay is a pioneer of Open Banking and the industry's leading Account-2-Account payment environment. Building upon the trust, scale and experience of our parent company Sentenial – who securely process over €42bn every year as an outsourcing provider to many of the world's leading Banks – we have worked tirelessly to reinvent what's possible from a modern banking and payment solution. Sentenial was founded by our CEO, Sean Fitzgerald in 2003. Today, we offer partners all around Europe a fully comprehensive, integrated payment solution that removes all traditional banking inefficiencies and unnecessary costs, saving time, money and resources at every turn. This is banking as it should be.

built from the bottom up with an API-first approach.

Throughout this process, we've gathered a lot of experience working with and delivering real-time payment APIs. This is critical to running a fully-functional Open Banking payment method. Nuapay is one of the few PISPs with the experience processing in excess of £40bn in payments year on year and on a 24-7 basis.

Financial IT: Please give us a real-life case example of applying your solution

Brian Hanrahan: Our Open Banking Payments capability has been received well within the financial services sector, where customers want to top up a prepaid card or wallet, pay off a credit card, transfer money to an FX provider, or send money into their online investment account. The PISP acts as an alternative to existing methods which are typically a debit card or a customer-initiated bank transfer – both of which have their drawbacks. Debit cards are typically more expensive for the merchant and have slower speed of pay, while bank transfers are inconvenient for customers and often prone to errors as customers mis-key reference numbers. Open Banking can offer customers and merchants the best of both worlds. In particular, in use cases like FX transfers, the fast speed of pay means the FX provider can immediately send the funds onwards.

Because of the success of our Open Banking Payments, we are now looking to go live with merchants in several other sectors. One of our major focuses is retail and e-commerce businesses where merchants want to reduce their cost of processing cards, and value Nuapay's refund and reconciliation solutions – a unique proposition within the market.

We are also uniquely placed to offer the insurance industry full payments capabilities such as Open Banking, Direct Debits and Credit Transfer functionality. Insurers can use this to collect an initial premium from a customer via Open Banking, collect subsequent payments via Direct Debit, and then (if need be) send any claim payouts directly back to the customer's same bank account with our Credit Transfer solutions. Again, this is a unique proposition to Nuapay which not only improves the whole customer experience, but reduces the risk for insurers.

Financial IT: Do you face any challenges while providing the solution to the customers?

Brian Hanrahan: We have two main challenges in providing our service.

The first is the quality of the APIs provided by the banks and the subsequent customer experience. These have required a lot of development over the last 18 months, but the good news is that the OBIE has done a great job to push the banks in the right direction.

The recent release of the App-2-App experience by all the banks has been a great step forward and a customer can now check out using Open Banking in about 20 seconds, with only 2 interactions (a fingerprint, then click on the confirmation button).

We are also looking forward to the launch of what they called "decoupled authentication" next year, which will allow consumers to make a purchase on their computer, by using the biometrics on their phone to authorise the payment. This is likely to help drive further adoption.

The second challenge is consumer education. Consumers are often happy to share data as they go through a credit application journey, or sign up to a personal financial management tool. But getting them to make a payment is another step, particularly in the absence of a well recognised payment button. We are currently working with a couple of partners on some community based initiatives here to educate consumers on the benefits and security of the solution, so they can be confident in identifying when they are paying through a trusted Open Banking solution.

Financial IT: What is your marketing strategy?

Brian Hanrahan: We are predominantly a B2B company, so we are speaking predominantly to PSPs (acquirers, payfacs, and payment gateways) as well as merchants and corporates who will buy our solutions directly.

We believe there are some certain sectors where the current state of Open Banking payments are particularly suitable today – this is where consumers have high mobile usage, and merchants benefit from speed of pay and security. Some sectors we are focused on include: financial services, mobile commerce, insurance, travel and ticketing.

Financial IT: What are your predictions for the payments industry for 2020?

Brian Hanrahan: 2020 is the year that Open Banking Payments will come to fruition.

There have already been vast improvements in the customer experience for Open Banking. All major banks have implemented an App-2-App experience, and as a result we are starting to see exciting growth in Open Banking payments.

In April, there were less than 40,000 PIS payments made across the UK, but in the figures that the OBIE released last week for August, there were over 450,000 PIS payments. That is still low in the context of total C2B payments in the UK, but with 10x growth in payments over the last 4 months we feel sure that Open Banking payments are now gaining broader market traction.

Financial IT
Innovations in FinTech

Frederic Martinez,
Director, Biometrics & Advanced Payment Cards,
Gemalto

gemalto
security to be free

BIOMETRIC PAYMENT CARDS: THE BIGGEST DEVELOPMENT IN CARD TECH IS HERE

Authenticating yourself with just your fingerprint to access sensitive apps on your smartphone or online services such as banking and shopping has become a normality. This is due to the enthusiasm with which consumers have embraced the convenience of unlocking their smartphones so easily. Biometrics have a big role to play in the future of payments too due to the convenience, speed and security this method of authentication is associated with. Last year independent analyst and consultancy company Goode Intelligence predicted that 2.6 billion consumers globally will use biometric payments by 2023.

When it comes to making card payments, consumers already enjoy the speed and convenience they experience when using a contactless card. It's not a surprise that the use of contactless payments surged by 31 percent in 2018 compared to the year before, as reported by banking trade association UK Finance.

Combining contactless and biometrics would really speed up the revolution of payments by not just offering frictionless authentication and speed, but also by reducing payment fraud. This will provide enough security for banks to lift the amount restrictions on contactless transactions.

Goodbye PIN, Hello Fingerprint

The payments industry is further embracing biometrics through the development of debit and credit cards with an embedded fingerprint reader, which removes the need for PIN or signature thanks to the reliability of fingerprint verification.

In order to pay for goods, customers simply place their fingerprint on the sensor on the card's surface. Then, if the fingerprint securely stored in the card matches the user trying to make a payment, the transaction is authorised. If, for any reason, the fingerprint does not match, the PIN code is available as a back-up option.

The wider adoption of biometric cards across the UK will soon be a reality, with NatWest being the first UK bank to conduct trials among customers. Following a successful pilot of the biometric debit card NatWest is now testing the technology further with credit cards, allowing customers to make contactless transactions that go above the £30 limit.

These cards offer a great alternative to traditional bank cards and are designed to meet the increasing needs of consumers for more security and convenience. In fact, recent research into this trend revealed that 88 percent of British consumers would swap their current card with a biometric one if they are proven to be more secure. In addition, 68 percent see ease-of-use as a sticking point. The good news is that biometric cards can meet all these needs.

Security by Design

Biometric cards have had security built into their design. The advanced solution within the card cannot be fooled by a 2D of your print. Moreover, the technology which is used to build the scanner will only evolve and strengthen over time. The card can also be cancelled remotely by a bank, just like a normal debit or credit card.

Fears that the fingerprint information is shared with banks or other third parties are unsound as the biometric data is ciphered and never leaves the secure storage of the bank card. The chip's high-level encryption ensures that the card can withstand robust attempts to access its data. This helps to neutralise concerns that a hacker could still gain access and compromise the data inside the chip. In addition, the fingerprint recognition is designed to work even if the user's fingerprint evolves during the lifetime of the card by dynamically adapting the reference model. In other words, slight changes to consumers' prints will not affect their ability to use their card.

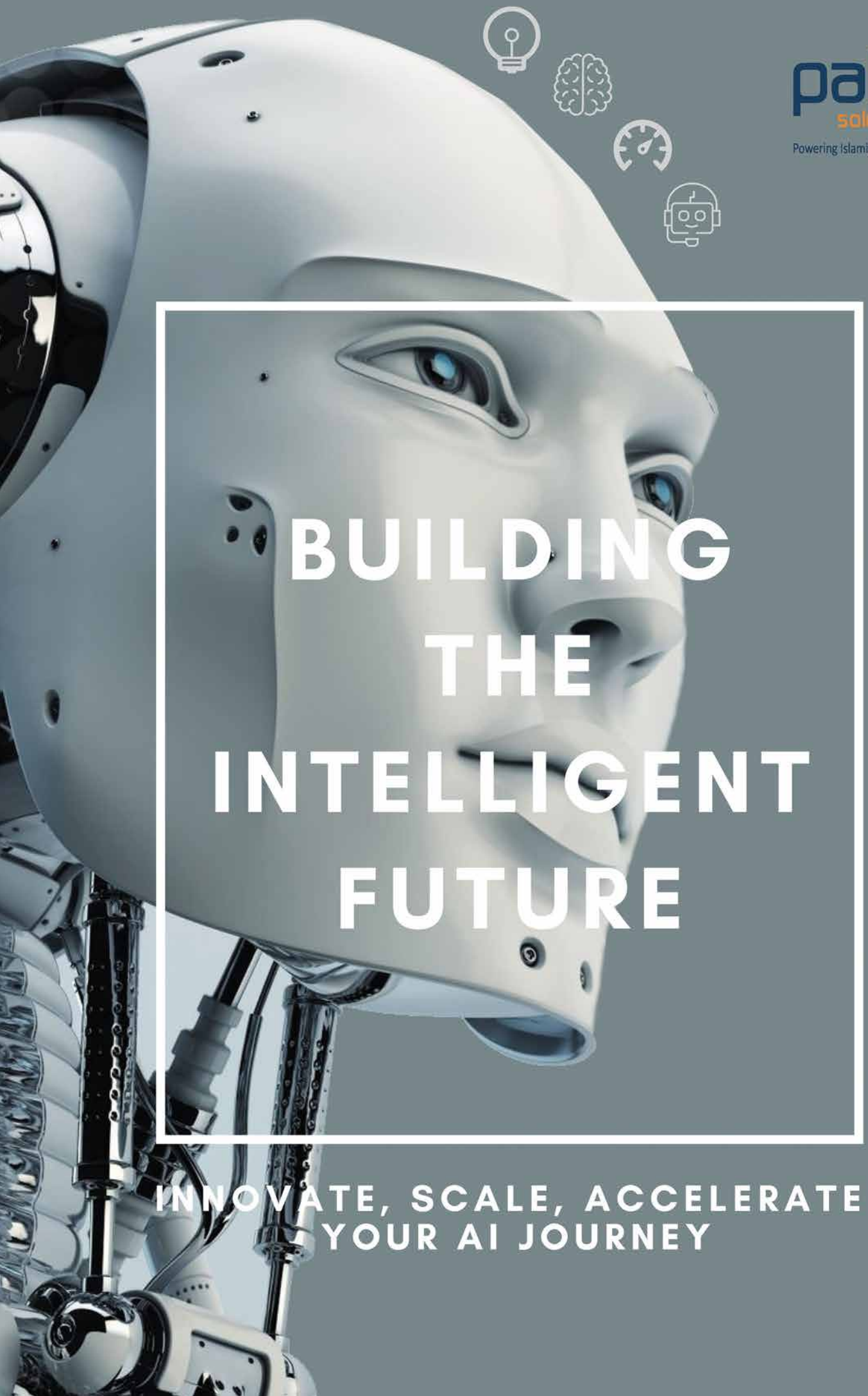
Easy set up

The fingerprint registration, when receiving the new card, has also been made quick and simple – customers can record a representation of their fingerprint to the biometric card from the convenience of their home via a small sleeve provided by the bank. Once the customer has inserted the card into the sleeve, it is then simply a case of presenting their fingerprint on the card's sensor several times until a green light on the card flashes three times. The enrolment process is complete once the card is taken out of the sleeve.

Looking Forward to the Future

Biometric payment cards are an exciting part of the future of consumer payments by providing intuitive, convenient, reliable and secure payment transactions. The technology behind the biometric cards is now well advanced, and it's only going to evolve over time and will become stronger and more secure. This is why we're working closely with NatWest bank in the UK and several issuers in other countries to address feedback from users and make sure they're getting the best experience possible. When you consider what consumers want – peace of mind, convenience and ease of use – the biometric card ultimately ticks all the boxes.

path
solutions
Powering Islamic Financial Markets



BUILDING THE INTELLIGENT FUTURE

INNOVATE, SCALE, ACCELERATE YOUR AI JOURNEY

QUANT NETWORK – CONVERGING BLOCKCHAIN, AI AND CYBERSECURITY

Financial IT chats with Gilbert Verdian CEO and Founder of blockchain technology company Quant Network. Tasked with connecting the world's networks to blockchain, Gilbert is building the Internet of Trust by converging blockchain, AI and cybersecurity. Having a keen interest in disruptive technology, Gilbert is the author behind the Blockchain ISO Standard TC307 initiative and is the Chair of the UK's national committee on Blockchain and Distributed Ledger technologies (DLT/1) as well as the Interoperability working group for ISO. He also sits on committees in the Federal Reserve, the EU's Blockchain Observatory, PayUK's Cybersecurity board and UK Government's DLT committees. He's actively working to advance technology in the areas of AI, Cybersecurity, Blockchain, Fintech & Health.

Financial IT: Just to start off we would love to hear more about Quant and your background?

Gilbert Verdian: My background is in Cybersecurity for 20 years. I worked across Government in Downing St, HM Treasury, Cabinet Office, Ministry of Justice and NSW Health and private sector at Mastercard, Vocalink, CSC, EY, PwC, BP and HSBC as a CISO, CIO and CTO.

Quant solves one of the biggest pin points and it is able to work with different technologies in blockchain. The industry loves blockchain and this technology is able to create new types of products and service offerings and it allows you to do that safely with trust.

However, the problem that everyone has is the dilemma which blockchain technology to use. And then they have limitations so, they will be locked into a particular blockchain technology, vendor or simply don't have the right skills to implement blockchain. Subsequently, we've simplified the adoption and implementation of any blockchain, allowing any Financial Services Institution and enterprise to use different types of blockchain with just three length of code and benefit from the combined features of different technologies. Furthermore, we are working across financial infrastructure with payments and settlement, Capital Markets to move digital assets and tokenised securities in the US and starting work with Central Banks across digital assets. We're in the middle of shaping the financial system of future.

Financial IT: What makes unique Quant compared other similar platforms?

Gilbert Verdian:Our approach and the way we've engineered our technology leverages our heritage and experience in cybersecurity, government and financial services. And the most important thing that blockchain should be properly implemented because of compliance, security and the risk around it. Quant simplifies how organisations take advantage of all blockchains, so they can focus on operating their businesses and unlocking the benefits that this technology presents.

We've developed an operating system approach which provides a platform for organisations to safely and easily work with multiple blockchains, even allowing internal blockchains, within their own environment to safely connect with any external blockchain networkss.

We are unique because we have already done interconnected 11 blockchains including internal enterprise blockchains.

Financial IT: What is next for Quant?

Gilbert Verdian:We have just launched the Overledger Network, a 'network of networks' for a hyper-connected world, solving the problem of interoperability for consortia and trade finance. The network of networks allows enterprises and organisations to host their own secure dedicated gateways, which can then connect securely to distributed systems, permissioned networks, permissionless networks, ecosystems, consortia and other distributed technologies. Providing participants market access to other networks to trade, create new products, revenue streams and new customers.

That's how society operates and by connecting enterprises and financial institutions all together, we're going to create openness to derive new types of value.

QUANT

Quant Network is a technology provider enabling trusted digital interaction, helping create a secure digital future to the benefit of enterprises, regulators, governments, and individuals. Recognised for having solved interoperability through the creation of the world's first blockchain operating system Overledger, Quant Network is leading the way for innovation and blockchain adoption across enterprise. Headquartered in London, UK, Quant Network is committed to building an internet people can trust. www.quant.network

www.its.ws

FINTECH AND SHARIA-COMPLIANT FINANCIAL INSTITUTIONS

SUCCESSFUL ADOPTION OF DIGITALIZATION WILL SEPARATE THE WINNERS FROM THE LOSERS

Interview with Esam Alkheshnam, CEO, International Turnkey Systems (ITS) Group

Financial IT: Esam, please tell us about ITS

Esam Alkheshnam: ITS is known as the leading provider of advanced technology solutions and products that are designed specifically for Sharia-compliant banks and financial institutions. Obviously, we are investing in new and innovative products. We are also expanding in terms of geography – particularly in the Middle East, North and Central Africa region and the Caribbean. In addition, ITS is currently offering its products and services in the western region of Morocco and the Russian Commonwealth (CIS).

Financial IT: Can you share a little about your main products?

Esam Alkheshnam: First, I'd observe that we think that our competitive edge comes from our ability to adapt to the rapidly changing needs of the industry. That's what is implied by the second and third words in our name – Turnkey Solutions. A financial institution can adopt our turnkey solutions and be confident that they can leave worrying about the changes to us. Our award-winning ETHIX solution includes a core banking system, a trade finance system, and profit calculation engines. Among much else, it enables our clients to create Digital Branches and to receive advanced reporting in relation to their operations.

Financial IT: What are the main trends pertaining to digitalisation of Sharia-compliant banks?

Esam Alkheshnam:The important thing to remember is that Sharia-compliant institutions are as exposed to disruptive change that is led by digitalisation as much as conventional institutions. Whether the change involves mobile payments, InsureTech, crowdfunding or peer-to-peer (P2P) lending, or a move towards use of robots in bank branches, there are major implications for Sharia-compliant banks and Takaful operators. Those institutions that can use digitalisation to provide high quality products through multiple distribution channels and guarantee a positive customer experience should thrive. Those that cannot risk becoming obsolete.

Financial IT: People have been talking about the implications of digitalisation for years. Why do you think that these trends have further to run?

Esam Alkheshnam:In a word, demographics. Something like half of the world's population are Millennials who are 30 years of age or younger. Many of them are living in countries where, by most metrics, the financial services industry is growing rapidly from a low base. None of them have long experience of pre-digital financial services. They take for granted the customer experience that is only available from a flexible and fully digitalised institution. They are becoming more numerous and wealthier. Some of them are already millionaires.

Financial IT: Do you have any other comments that you would like to make?

Esam Alkheshnam:Digitalisation and FinTech are enablers of Sharia-compliant financial services. They should make it possible for Sharia-compliant banks and Takaful operators to expand more rapidly than would otherwise be the case. As I explained in my discussion of demographics, the drumbeat of change will continue – and the tempo will likely increase.

International Turnkey Systems Group K.S.C.C – (ITS) is a leading integrated information technology solutions and services provider that offers world class solutions that transform organizations and support business success.
Established in 1981, ITS is Headquartered in the State of Kuwait with R&D centers in Kuwait & Cairo, and seven offices and numerous partners worldwide. With a 1,100 plus strong team of diverse professionals, ITS serves hundreds of top tier clients locally, regionally and across the globe through its Global Delivery Center (GDC) where it develops, designs and delivers cutting edge, customized software and service solutions.

Mr. Esam AlKheshnam,
CEO, ITS.

Mr. Alkheshnam is a distinguished industry veteran with a career that spans more than 25 years in the fields of information technology and software solutions. Prior to his appointment in February 2017 as the Chief Executive Officer of International Turnkey Systems Group (ITS), Alkheshnam held numerous senior positions in the field. The most recent being head of the IT Strategic Planning Department at the Central Bank of Kuwait, where he worked closely with the nation's banks and financial institutions to elevate performance standards. During his career, Alkheshnam has been credited with several notable achievements, including the innovation and management of several advanced IT solutions for numerous renowned regional and international companies.

As CEO of ITS, Alkheshnam is defining a new vision for the Group as he further underscores the Company's position as a leading provider of quality IT solutions and services for the local, regional and international banking industry. Alkheshnam holds a Bachelor's degree in Computer Engineering from the US, and a credential in Strategic Management from Harvard Business School.

Financial IT
Innovations in FinTech

Wael Malkawi,
Executive Director for Business Development at ICSFS

DIGITAL BANKING: THE KEY TO WORKING WITH DISRUPTION

Banks have been chasing digital transformation ever since the creation of fintech, when tech giants started imposing changes and creating new platforms for doing business. Today, banks are obliged to embrace digital technologies and fully leverage these changes in order to facilitate the demands of customers and proactively roll out new products. This enables them to both nurture and strengthen a customer-centric approach. As such, digital banking has become the key pillar of any bank's strategic evolution in today's highly competitive environment.

ICSFS believes that in order to be truly digital, a bank must re-engineer the way it does business by creating a new strategy of digitalization in its business model. Essentially, banks must face the growing competition from fintech start-ups, multinational organisations and tech giants through continued disruptive innovation.

The key to any successful transformation is choosing the right partner with whom to drive innovation, generate new opportunities and create market advantages over competitors in the field. This is where our innovation lies in flexibility, simplicity and efficiency. With decades of experience, ICSFS is recognised for its success in all of its operational regions, as it has a great understanding of international trends, as well as local requirements, regulations and culture. By implementing the ICS BANKS Digital Banking software platform, banks and financial institutions can generate new opportunities at a lower cost in order to enhance their market advantage. They can also exploit the software's key benefits to help create a better customer experience and journey.

Thanks to our secured and agile open banking integration, rich functionalities are accompanied by cutting-edge technologies and fully integrated digital banking touchpoints. This means that banks can offer their customers a truly virtual digital journey which, in turn, drives financial inclusion.

Our digital banking platform is embedded in the DNA of our universal banking applications (ICS BANKS and ICS BANKS ISLAMIC). Therefore, agility is seamlessly reflected in all the universal banking applications' products across all touchpoints, without the need for complexity or interfaces.

Omni-channel

Our software suite's proven omn-channel capabilities provide a full cycle of banking functions that are executed digitally – from customer onboarding and Know Your Customer processes to product execution and customer relationship management. It also offers flexible credit scoring, with a strong rules-based engine and back-office processes that are powered by an embedded BMP engine. The ICSFS digital platform is recognised for its advanced technological deployments, such as blockchain, smart contracts, open application programming interfaces and artificial intelligence, which all provide a real boost to customer experience. Many digital banking software providers offer a multichannel banking experience, instead of an omnichannel one. The difference is that when a bank uses a multichannel process, its touchpoints will not be seamlessly connected – this means its customers will not enjoy consistency and real-time access between any channel, anytime, anywhere.

ICS BANKS Digital Banking is available on cloud platforms, thereby providing a one-stop shop for customers seeking trusted business applications and service providers. Banks using ICS BANKS Digital Banking on the cloud can leverage global automation of communications and transactions with greater flexibility, agility and security.

Future-proofed platform

ICSFS continually reinvests in its software suites by implementing the latest technology to launch new products, create agile integration and keep pace with new standards and regulations worldwide. The ICS BANKS Digital Banking software suite future-proofs banks by offering a broad range of features and capabilities, which then provides greater agility and flexibility to enrich the customer's experience. What's more, personal customer analytics are provided through embedded analytics

for activity-based reporting and customer performance, which thereby improves the trust and confidentiality between the customer and their bank.

The suite also encompasses an ecosystem of third-party services, because banks that want to survive and stay ahead of their competitors in this age of digital disruption must be prepared to collaborate with fintech firms. Fortunately, the suite controls how fintech digital business applications and services are delivered to banks' customers, allowing them to maintain a competitive edge and improve customer satisfaction with minimal cost and time needed for integration.

Eliminate market share loss

Banks should accelerate now to protect and expand their market share in the era of digital disruption. The speed of transaction is aligned with the speed of innovation, and banks must not turn a blind eye – they must embrace this revolution by first realising that innovation is not something they can do alone, and instead obtain the help of software providers that are up to speed with ongoing digital changes.

The whole world is interconnected. Today, governments are promoting financial inclusion and seeking to create a centralised database for citizens, including payments, transfers, personal data and more. Banks can benefit immensely from this amount of trusted data, as well as from other data sources, like social media, big data and apps. In turn, this information can be used to improve machine learning to create better results when using digital banking. This will result in the creation of more revenue sources. The data can also be used to make operations more efficient and increase market share for financial institutions.

Taking a step forward is fundamental for those who want to be part of the digital banking revolution – taking services off-the-shelf is the only logical step for evolving in the new market. Opportunities in emerging markets are opening up; being Cloud-available enables the global automation of transaction and delivery channels and communications. Therefore, choosing the right partner to guide this transformation is a top priority for those looking to succeed. ICSFS is setting the pace for what the new era of banking should look like. Professionalism, experience and market understanding make this company a key player in the regional banking software solutions market. It is now set to keep revolutionising the way banking is done, because this revolution is just the beginning.

Digital transformation: the key principles

ICSFS emphasises three main principles a bank must adopt: first, applying the latest technologies and making them available to customers. Second, enabling consumer firms to maximise their performance by increasing mobility, cost efficiency, efficacy and flexibility, and by filling the gap between strategy and execution. Finally, banks must provide innovation and tailored solutions for specific clients and countries.

Amrik Thethi,
CTO, Torstone Technology

Amrik has extensive experience as a technology leader and software architect. He has broad experience of large scale software architecture and complex project implementation working in both the UK and the US. He worked at KBC FP, Deutsche Bank and several technology startups prior to joining Torstone.

BARRIERS TO ENTRY IN BANKING ARE FALLING

A recent paper by UBS analysts, 'Big banks and the bigtech, fintech & digibank incursion', reports that challenger banks are launching with an advantage over incumbent firms due to their use of cloud-enabled banking systems, limiting their IT-related cash burn.

The concept behind cloud-enabled banks and capital market firms has always been straightforward: freedom from fixed-cost legacy technology allows them to compete more effectively and flexibly as costs rise and margins fall.

The UBS report analysed 49 big banks and found that their IT assets have more than doubled since 2010, leaving total intangible IT assets at US$70bn by the end of last year, up from US$32 billion in 2010. In other words, banks are sustaining barriers to their own growth.

For capital markets-focused banks, this growing tech stack creates a host of problems when operating within an extremely cost-focused environment. Profitability of business areas which require balance sheet commitment has fallen considerably since 2010, while more historically-profitable businesses, such as FX, struggle after the first half of 2019, when many currencies traded in a tight range. The fixed costs for processing and administrative work in the middle and back office add to the burden.

Consider a traditional risk management system, which provides coverage of a fixed range of risks and has pre-set connections to other systems, set up in the proprietary data centre and the corresponding disaster recovery data centre. Gaps in the system's functionality – either by asset class, risk type or reporting function – require integration via other systems or by customising the platform. The system also must be integrated with the databases used by business lines, and then out to the databases required for risk and compliance.

In this scenario, both reskilling and hiring new people to look after each element of the tech stack is in the hands of the bank, as is the management of change when market practice or market rules evolve. Temporary addition of team members to work on upgrades, licensing to database vendors and ongoing maintenance expenses all add to the total cost of ownership.

The advantages of more modern approaches are marked. Deployment of technology in the cloud removes a host of problems.

Firstly, the technology is hosted, developed and maintained by a team that with expertise in how the system works, how it can be adapted and how it can be integrated with other systems. Those teams do not have to be mirrored within the bank in order to develop and improve, because they can collaborate with the firm's internal experts in order to build what is required.

Secondly, cloud-based systems use development methodologies such as Agile and DevOps, designed to incorporate user feedback during the development process in order to minimise any gaps between design, development and deployment. As a result, the outcome is a far better technology tool set, more closely aligned with user needs and expectations.

Thirdly, and crucially, control of the cloud model is now firmly in the hands of the bank, which means concerns around privacy and access have been fully addressed by service providers. For example, data can be moved between remote systems across jurisdictions through masking, in order to address the risk of information being viewed outside of its original jurisdiction, while still allowing the data to be analysed. The developers who build systems are only able to support them through strict permission controls, which mitigate the risk of fraudulent or erroneous activity, putting power in the hands of the bank while retaining the edge that is a benefit of using the most knowledgeable developers to handle upgrades, new functionality and integrations.

The barriers to entry in banking are falling; banks stuck sustaining barriers to growth only will cede an advantage to their rivals.

ETHIX Finance

Solution for the Digital Age

The growing global demand for Islamic financial solutions presents a major opportunity for financial institutions. ETHIX Finance by ITS is designed to equip organizations with the tools they need to deliver innovative banking solutions that are fully Shari'a compliant and in accordance with Accounting and Auditing Organizations (AAOIFI) and the International Accounting Standards (IAS).

ETHIX Finance is a solution for today's fast paced digital economy. It elevates banks to the Digital Age fast, providing an integrated and efficient system that facilitates seamless Transaction Steps Management, What-If Analysis, Credit Scoring, Credit Limit and Collateral Management, Cash Flow Engine, Deal Tracking and a Full Policy Parameters Module for Customer Eligibility.

Through SOA- based architecture, STP, Islamic Instrument Definition Engine, and Workflow Engine, ETHIX is building the foundation which will help financial institutions solve the challenges of tomorrow.

www.ITS.WS

ETHIX FINANCIAL SOLUTIONS

Follow us

Follow us: @ITSGroup
Like us: itscorporate
Engage with us: international-turnkey-systems

More Information

www.its.ws info@its.ws


Check out the Agenda online!
Chief Data Analytics Officers, Fall
• Revolutionize Your Data & Analytics Strategy •
• Drive Internal Transformation • Boost ROI •
cdao-fall.coriniumintelligence.com
November 18–20, Boston MA
Corinium
connected thinking
Join the Largest Gathering of Data & Analytics Executives on the East Coast!
Save $100 on your Pass with Promo Code: FIT100
#CDAOFall

rbr EVENTS

Meet our conference partners

RBR events bring together the world's leading banks and industry experts – join our growing partner lineup...

IBM, Google, Santander, Diebold Nixdorf, Wells Fargo, BNP Paribas, Microsoft, citi, HSBC, TSB, Mastercard, Starling Bank, Alogent, DBS, Tandem, ING, CaixaBank, KBC, G4S, March Networks, S21sec, FirstOntario Credit Union, McKinsey & Company, wirecard, Nationwide Building Society, Brinks, OKI, SEB, Barclays, Fincite, emerico, Intesa Sanpaolo, FIS, Visa, CIMA, fido Alliance, Glory, İşbank, Sberbank, skedify.me, fiserv., I-AM, HID, gmv, cpi, KIRANanalytics, TD Bank, BBVA, AXIS Communications, JCB, Millennium bank, AURIGA, Cennox, Standard Chartered, Grupo Financiero Banorte, BNL Gruppo BNP Paribas, nuggets, CIBC, allen international, TMB Bank, EY, PBZ, ACF Technologies, Danske Bank, RBS, GTBank, nexmo, Worldline, SIX, BMO, TecBan, 11FS, Banco Republica, NMMONEYGROUP, sumup, Garanti BBVA, Renovite, KAL, dormakaba, NCR, Marsh, Hitachi, BLM, OCBC NISP, DenizBank, OP, Genetec, Euronet Worldwide, Johnson Controls, Coventry Building Society, CYBG, BS2, Itaú, mob, EPA Emerging Payments Association, Extentia, K&H, BNY Mellon, Reiner, Virgin money, Nordea, Bradesco, PayKey, Sveriges Riksbank, dudley, TMD Security, Nokas, Kuveyt Türk, TEB, Monobank, esq, Maybank, HORIZN, Eurobank, UOB, CIMB Thai, Halifax, bvk, BPI, AF, Penser, Camor Consulting, Vertros, Chase, Inetco, Wavetec, spinnaker, Lloyds Banking Group, Post Office, evolis, Bankhaus August Lenz, Link, Deloitte., Standard Bank, Zenith, Monex, feerica, //ABANCA, socash, National Cyber Security Centre, Associated Security, Alfa-Bank, pyramid, Banking Automation, Lockpoint, Bank Muamalat

learn | explore | network

www.rbrlondon.com/conferences