



**BANKING
TECH AWARDS**



Winners Supplement 2020

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ENTRY DEADLINE: 31 March 2021

The categories **open for entries** are:

PayTech Project Awards

Best Consumer Cards Initiative
Best Corporate Cards Initiative
Best Consumer Payments Initiative
Best Corporate Payments Initiative
Best SME Payments Initiative
Best E-commerce Initiative
Best PayTech Partnership
Best Mobile Payments for Consumer Initiative
Best Mobile Payments for Business Initiative
Best Use of Security/Anti-Fraud Solution in Payments

Best Contribution to Economic Mobility in Payments
Best Benefits/Loyalty Initiative
Best Use of Biometrics in Payments
Best Prepaid Initiative
Best UX/CX in Payments Initiative
PayTech of the Future
Best Green Initiative
PayTech for Good
COVID-19 Response

Excellence in Tech Awards

Best Open Banking Solution
Best Real-Time Payments Solution
Best Cross-Border Payments Solution
Best Smart Payments Solution
(Smart tech = AI/ML/Robotics/Big Data/etc.)
Best Cloud Payments Solution

Leadership Awards

Woman in PayTech
PayTech Leadership
Rising PayTech Star
PayTech Team of the Year
Diversity & Inclusion Excellence

Welcome to the Banking Tech Awards 2020 supplement!

Here, we showcase some of the winners of our flagship **Banking Tech Awards** (now in their 22nd year!) – commending the most impactful, innovative and successful projects, products and services in the financial services technology space in 2020.

Banking Tech Awards also put in the spotlight the individuals and teams who have demonstrated skills, leadership, vision, inspiration and dedication to the industry's betterment.

The 2020 awards ceremony was broadcast digitally and hosted by a stand-up comedian Tom Ward, with hundreds of attendees joining us to celebrate businesses and individuals who have shined in a very difficult year.

The virtual event saw hundreds of people tuning in from across the globe and was a testament that it can be entertaining, light-hearted and fun even in a digital environment. If you'd like to see Tom perform his stand-up and unveil the winners and highly commended, check out the video (and it's just 35min long) – the broadcast is free to view on demand [here](#).

We would like to thank everyone who tuned in, and you, our readers, as well as the Awards' judges, sponsors and partners, and the FinTech Futures team for their hard work in putting it all together.

We hope to see you at the 2021 Banking Tech Awards in December... and maybe this time even in a long-awaited physical environment, to enjoy the face-to-face networking and celebration!

The FinTech Futures and Banking Tech Awards team

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**FINTECH
FUTURES**

The BankingTech Awards 2020 | 03

Winners & Highly Commended

BankingTech Project Awards

Best Tech Overhaul

Winner:

Bank of America - Branch Transformation

Highly Commended:

Absa Group Limited - Technology Separation Programme

DBS Bank - DBS Hong Kong Core Banking Project

Best Use of IT in Retail Banking

Winner:

Sberbank - P2P Subscriptions

Highly Commended:

Emirates NBD Liv. Digital Bank - Liv. Digital Bank

Novo Banco - New Digital Onboarding Experience

Best Use of IT in Corporate Banking

Winner:

Barclays - Trade OCR Solution

Highly Commended:

Bank of the West BNP Paribas - Digital Channels and Enterprise Payments Hub

Best Use of IT in Private Banking/Wealth Management

Winner:

BTB connecting loans in Israel - B-match.

Highly Commended:

Bambu (Mangosteen BCC Pte Ltd) - Beanstox

Best Use of IT in Treasury and Capital Markets

Winner:

HSBC - MyDeal

Strands Open Hub

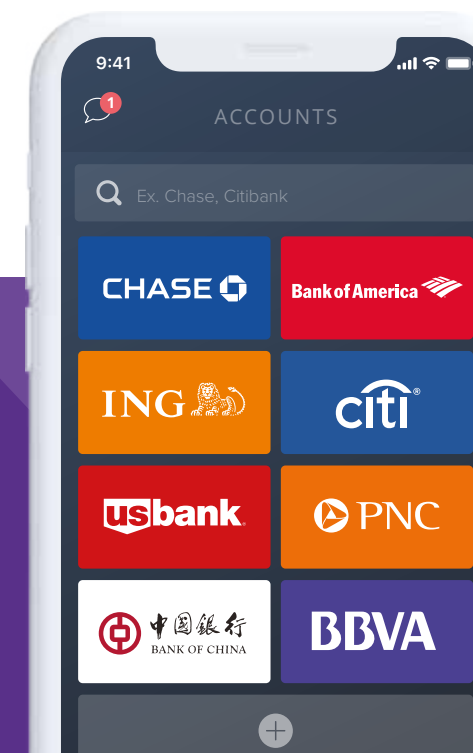
One Platform, Multiple
Data Sources



BANKING
TECH AWARDS

Best Open Banking
Solution 2020

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Apple Podcasts

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Best Use of IT for Lending

Winner:

Bank BRI - BRI Ceria

Highly Commended:

Divido - Powered by Divido

Best Digital Initiative

Winner:

DBS Bank - Enabling "invisible banking" through Open APIs on DBS Marketplaces

Highly Commended:

Novo Banco - Small Business Finance - Digital Experience

U.S. Bank - Onboarding Tracker

Bank of America - Erica AI-Driven Virtual Assistant

Best Mobile Initiative

Winner:

Yolt - Yolt App

Highly Commended:

Bank ABC - ila Bank - Revolutionizing banking across MENA

BANCO DE CRÉDITO - YAPE

JPMorgan Chase - Consumer & Community Banking (Chase) - Snapshot

Best Use of AI

Winner:

au Jibun Bank Corporation - AI Japan Market Forecast

Highly Commended:

Bank ABC - 'Fatema' - the world's first AI-powered digital employee with Digital DNA™

Bank of Montreal - BMO AI Cashflow Prediction

Best Use of RegTech

Winner:

Morgan Stanley - Fundamental Review of the Trading Book (FRTB)

Highly Commended:

Discover Home Loans - Improving efficiency of mortgage regulatory compliance through automation

Best Use of Data

Winner:

HSBC - Global Social Networks Analysis (GSNA)

Highly Commended:

Scotiabank - Enhancing the customer digital experience during COVID-19

Volvo Financial Services - Leveraging telematics data for a better customer experience

Best Use of Fraud Protection Technology

Winner:

Signicat and SurePay - Signicat's Digital Identity Verification with SurePay Confirmation of Payee (CoP)

Highly Commended:

CaixaBank S.A. - CaixaBank Sign

Checkprint Limited, A Member of the TALL Group of Companies - UCN Plus® - An Image Survivable Feature

Best Use of Biometrics

Winner:

Keyless Technologies - Keyless Zero-Knowledge Biometrics

Highly Commended:

Behavox - Behavox Voice Biometrics

DBS Bank - DBS Palm Vein Technology Enabled Payments

Best Use of Cloud

Winner:

UBS - UBS My Hub External

Highly Commended:

Saxo Bank - Saxo's migration to the Cloud.

HSBC - Markets Grid

Best FinTech Partnership

Winner:

ClearBank and Tide - ClearBank Tide Business Banking

Highly Commended:

Caixa Geral de Depósitos - Dabox App - an open banking solution

SEB - SEBx/UNQUO & THOUGHT MACHINE

Verrency

TCS BaNCS Global Banking Platform

Creating Trusted Digital Relationships



Uncertain times beget innovation. Banking is no different. With the right tools and technology, banks the world over are laying the foundation for transforming social distance into elevated customer management and experiences while bringing in resilient ways of navigating financial uncertainty.

Creating more cohesive and personal digital journeys that engender trust. That's what the TCS BaNCS Global Banking Platform is all about.

A contemporary digital banking solution with a global footprint, it leverages a rich ecosystem of partners and FinTechs, actionable data insights, cognitive tools and APIs, to help your bank launch new products and even new business models, acting as a platform for collaboration. It can help you dynamically define and create digital products and services that are contextually right for your customers, while also increasing revenue opportunities for your bank. The solution's cloud native architecture and microservices based approach paired with agile methodology, can help you scale, innovate and create the experience your customers expect today.

Talk to us to know more. Write to
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FinTech of the Future

Winner:

FINOS - Open Source Technology

Highly Commended:

Marqeta - Marqeta's open API issuing and processing platform

Best UX/CX in Finance Initiative

Winner:

United Overseas Bank (UOB) - TMRW by UOB

Highly Commended:

Sberbank

Tinkoff - Tinkoff super-app

Best Green Initiative

Winner:

Mastercard - Mastercard Sustainable Cards Program

Highly Commended:

Enfuce - My Carbon Action

Best Contribution to Economic Mobility in Banking/Finance

Winner:

BPC - Safal Fasal

Highly Commended:

Banque Populaire De Mauritanie (BPM) and Comviva - Bankily

Cebuana Lhuillier Rural Bank - Cebuana Lhuillier Rural Bank: Revolutionizing the Concept of Saving Money for Every Filipino through Cebuana Lhuillier Micro Savings

FinTech for Good

Winner:

Absa Group Limited - Absa Cybersecurity Academy

Highly Commended:

Affirm - Affirm Cares Employee Foundation

COVID-19 Response by Financial Institutions

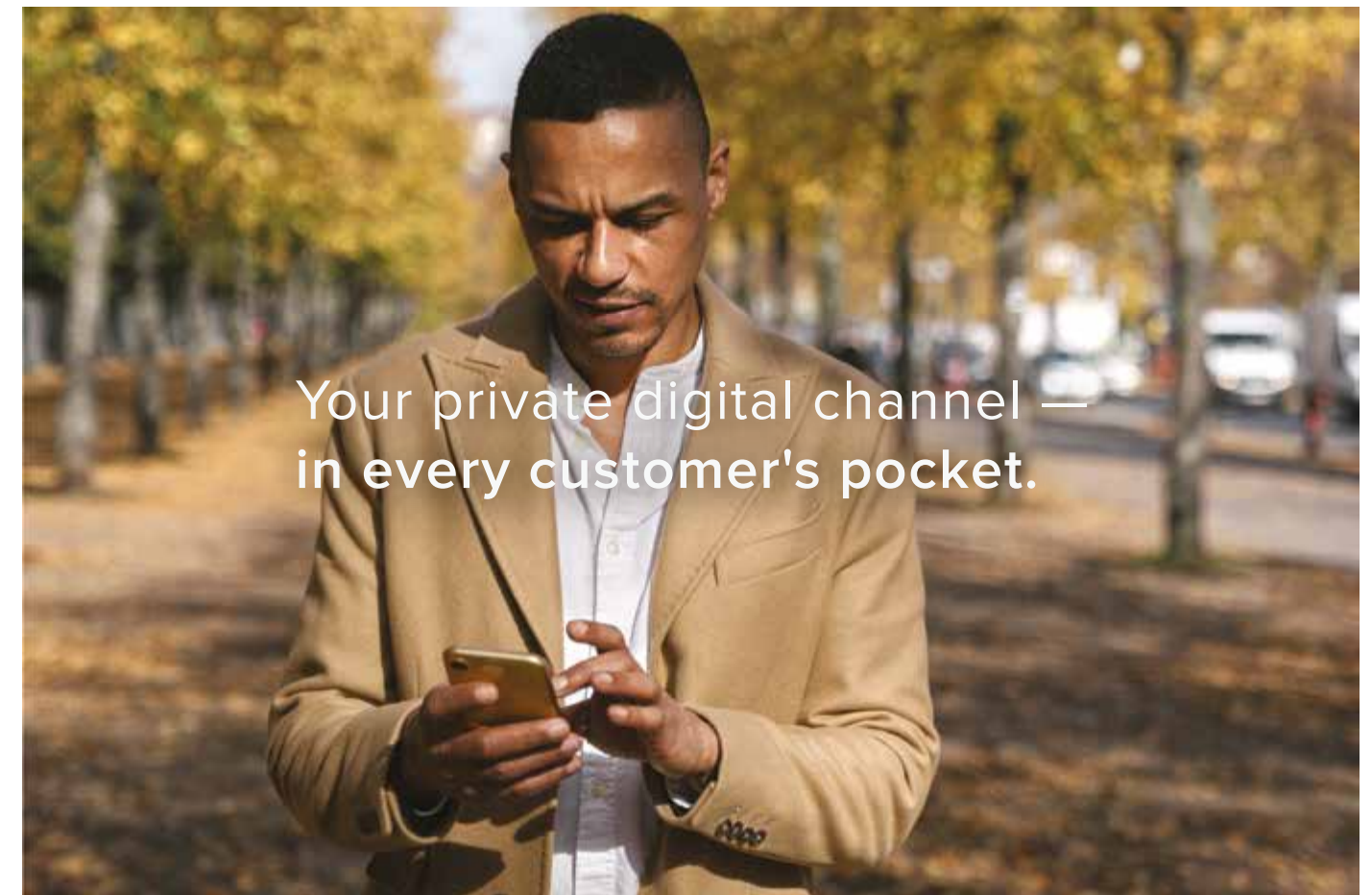
Winner:

Starling Bank - Connected card

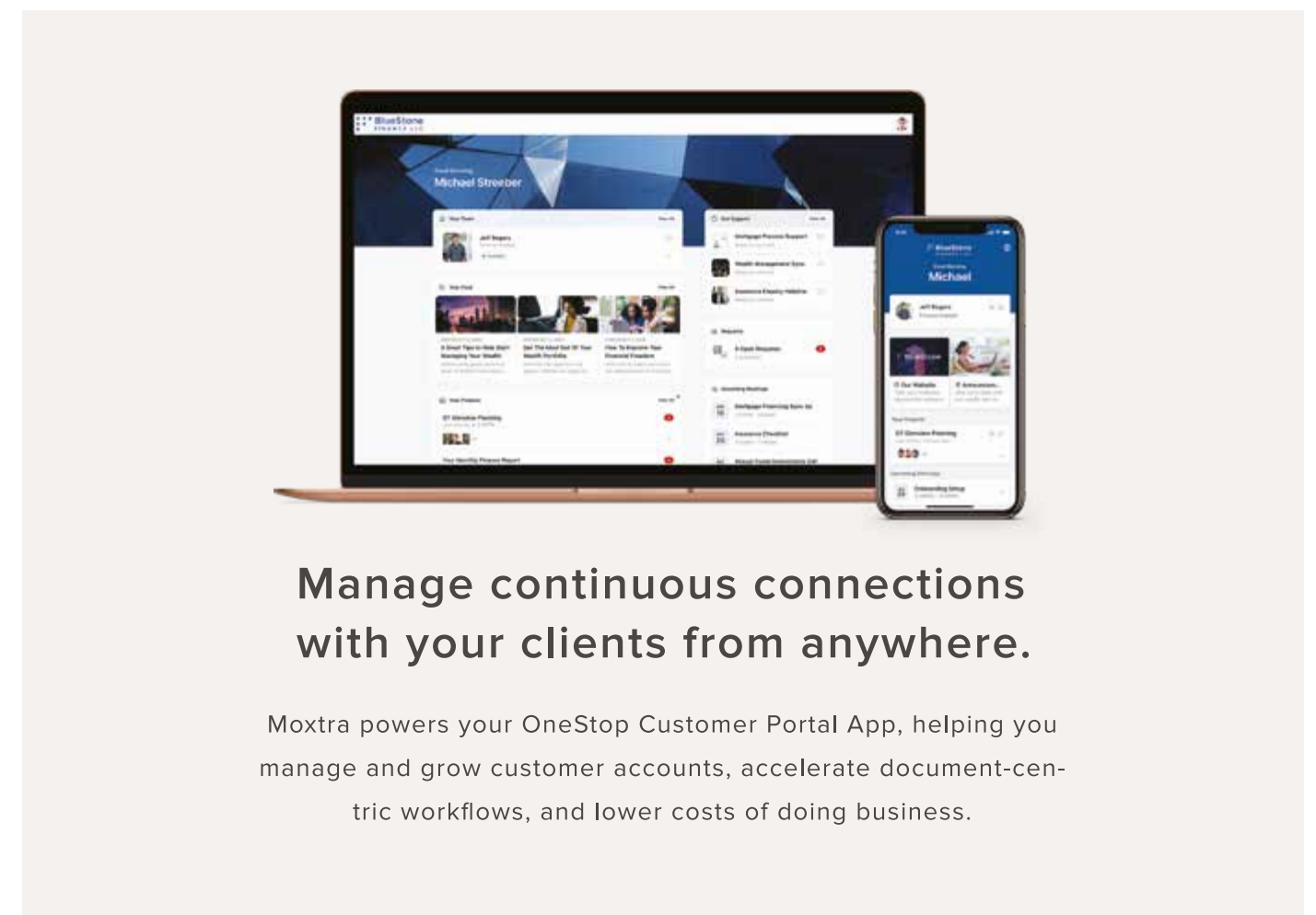
Highly Commended:

CaixaBank S.A. - Embracing the new normal

Israel Discount Bank - PayBox Payments App: Doing good in days of Corona - "How Social Payments Can Triumph Social Distance"



Your private digital channel —
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Technology is at the very heart of UBS. As a team of thousands of talented people, we have a critical role to play in building, delivering and maintaining the systems, services and infrastructure that power our business.

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Leadership Awards

Woman in Technology (W.I.T.)

Winner:

Kate Bohn, Accelerator & Incubator Lead, Innovation & Strategy, Lloyds Banking Group

Highly Commended:

Julie Shapiro, Head of Finance, Risk and Analytics Services Technology, UBS

Mitra Roknabadi, Vice President, Global Head of Marketing, OpenFin

Vilve Vene, Co-Founder and CEO of Modularbank, Modularbank

Tech Leadership

Winner:

Jaya Vaidhyanathan, CEO, BCT Digital

Highly Commended:

Gabriele Columbro, Executive Director, FINOS

Nadia Hartman, Vice President, Morgan Stanley

Rising FinTech Star

Winner:

Alexandra Boyle, Director, Head of Strategic Client Group in Europe, OpenFin

Highly Commended:

Sunil Ravva, Portfolio Architect, HSBC India

Tech Team of the Year

Winner:

J.P. Morgan Asset Management, Spectrum Core Team

Highly Commended:

Charles Schwab Investment Management, Investments Technology

Diversity & Inclusion Excellence

Winner:

Sberbank - Online banking for visually impaired entrepreneurs

Highly Commended:

HSBC Technology India - HSBC Technology India: Inclusion and Diversity Workstream

J.P. Morgan Asset & Wealth Management - Societal Tech Matters Hackathon

Excellence in Tech Awards

Best Core Banking Solution Provider

Winner:

INFOPRO - INFOPRO Digital Core Banking

Highly Commended:

DPR Group - Core banking platform – Servicing and origination for mortgages, savings and loans

MANTL - Midwest BankCentre (Rising Bank)

Best Digital Banking Solution Provider

Winner:

Moxtra - Moxtra's Digital Branch Solution

Highly Commended:

FintechOS Technology UK Ltd - Retail&SME digital banking

Galileo Financial Technologies - Galileo Instant Issuing

Best Smart Banking Tech Solution

Winner:

Mosaic Smart Data - MSX and MSX360

Highly Commended:

ABAKA - Predictive Next Best Actions

Bank of America - Erica AI-Driven Virtual Financial Assistant

NEC X and VACO - A cognitive application, using AI and ML technology to meet compliance and regulatory requirements for personal identifiable information (PII) Data Redaction

Best Open Banking Solution

Winner:

Strands - SAU, Open Hub

Highly Commended:

Finicity - Finicity Lend: Open Banking Platform for Credit Decisioning

Infosys Finacle - Finacle Digital Banking Suite

COVID-19 Response by Fintechs

Winner:

Automated Financial Systems, Inc. (AFS) - Mass Update Tool for PPP Loans

Highly Commended:

BillGO - BillGO's Bill Pay Relief Hub

Pollinate - Pollinate Orders launched for hard hit dining sector

THANK YOU!



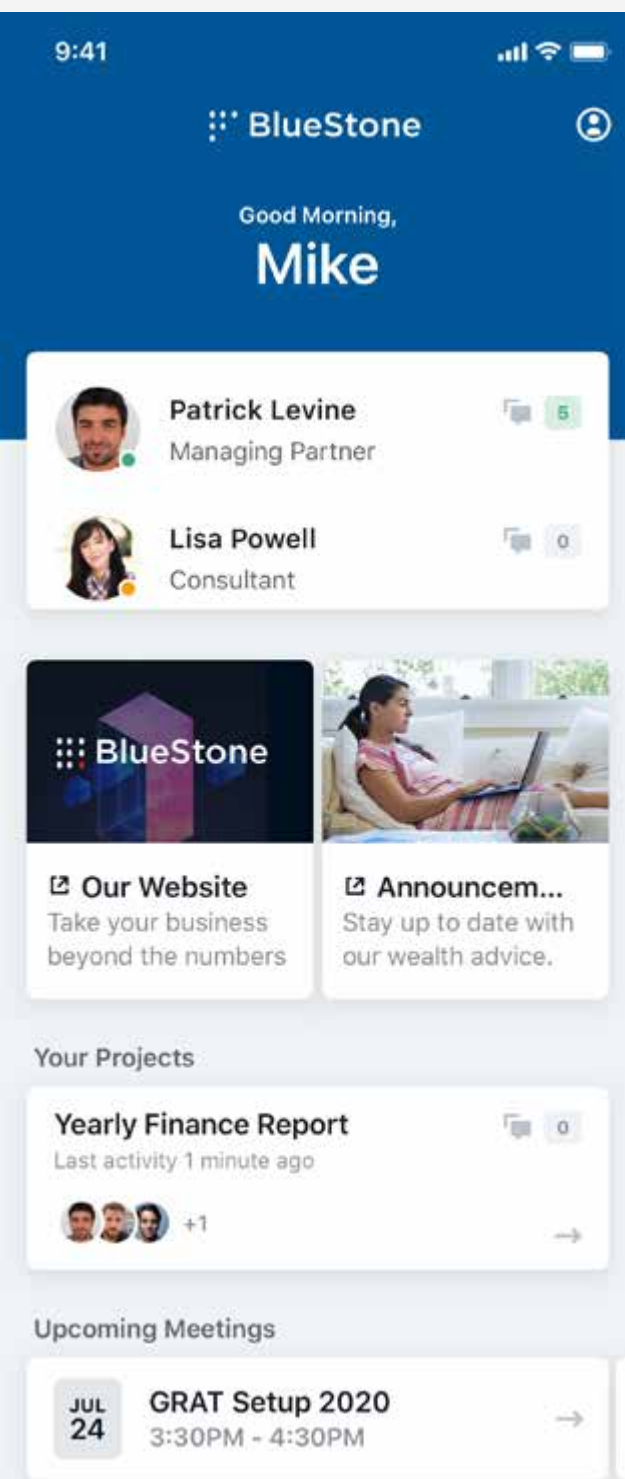
Thanks to the BANKING TECH AWARDS judges who chose BTB technology in first place in the category of Best Use of IT in Private Banking / Wealth Management



Our technology is proving itself in protecting our investors' money every day – and it is gratifying to see that our hard work has also gained international

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Moxtra: Enabling digital customer experience in financial services and beyond



Moxtra, a Cupertino-based technology company, has grown rapidly in financial services and subsequently in other vertical sectors with its platform for delivering customer service via secure digital channels.

Cupertino, CA-based Moxtra has grown rapidly by helping businesses to deliver secure, high-touch digital channels to their customers. It started with large enterprises and financial services and has an extensive global customer base in the latter sector. The platform's core capabilities of translation of business over digital proved to be transferable and it now has users across a wide range of verticals, including retail, real estate, law, education, creative, and event planning firms.

After early success at Citibank for private banking, the company gained good traction in this sector, initially particularly in Asia Pacific. Since then, it has broadened into other areas of financial services, including corporate banking, lending, mortgages and insurance, as well as a number of other verticals. In total, it claims almost 500 customers.

The events of the last year or so have further pushed companies to examine their digital strategy. Moxtra's Chief

Branding Officer, Leena Iyar, says that as a result of the pandemic, existing business conversations have tended to accelerate and projects that might have had a two-to-three year timeline have been brought forward.

Moxtra was set up in 2012. Co-founder and CEO, Subrah Iyar, was co-founder and CEO of WebEx Communications until its 2007 acquisition by Cisco Systems. Fellow Moxtra co-founder and CTO, Stanley Huang, was a senior director of engineering at both WebEx and Cisco. The company has been largely self-funded and now has around 220 staff across offices in London, New York, Amsterdam, Sydney, Bengaluru, Shanghai and Singapore.

Moxtra started with a free app but then went "back to build out our platform", says Leena Iyar. It was clear the need for businesses to own the customer experience by providing their customers with their own secure, managed and branded portal that ensured data privacy, she

says. The company describes the resultant offering as a platform powering one-stop customer portals, with a UI/UX and Workflow layer that supports conversational user experiences, tailored to business roles and workflows.

It supports secure messaging; digital signatures; transaction processing; video meetings; virtual data rooms; the ability to make visual, vocal, and video annotations on shared files; task management; screen-sharing; cloud storage; and support for social connectors including WhatsApp and WeChat. Users maintain visibility on all communications and it supports cross-border regulatory requirements and geo-specific standards such as MiFID II, GDPR and PSD2.

There is a white-label version, says Leena Iyar, that can be rapidly deployed on an app store. An example of a bank that took this approach is Bank of Queensland for its Pocket Banker by BOQ app, which allows users to connect and chat securely with their BOQ banker at a time and place of their choosing. Other deployments might take longer, she says, depending on the extent to which a bank wants to integrate workflows

with its existing enterprise systems.

A Management Portal provides a comprehensive overview of all client-relationship manager interactions and ensures quality responsiveness from internal teams and performance to business goals. It stores a complete client profile and history of conversations, ensuring persistent relationships and a smooth transition to any relationship manager.

Among high-profile financial services clients in the public domain are Bank of Singapore, OCBC, Raiffeisen Bank International, Standard Chartered and Van Lanschot. At Citibank, Moxtra powers Citi Hello, through which clients can interact with relationship



managers in an immersive environment, maintaining a continuous overview of the health of their portfolios.

There's now plenty of additional demand, not least as banks seek to react to fintechs and challenger banks by increasingly seeking to embed their services into their customers' lifestyles. "We are seeing a lot of interest in providing seamless, convenient digital journeys for the customer, banks are paying a lot of attention to it," says Leena Iyar.

Moxtra was founded around delivering a new generation of collaboration experiences built for the mobile-first digital age – a topical area that has only become more pressing within many institutions as this sector evolves so rapidly.

Rising FinTech Star: Alexandra Boyle, OpenFin



Alexandra Boyle, director, head of strategic client group in Europe at OpenFin and winner of the Fintech Rising Star award, talks digital transformation in financial trading, being the youngest person in the room at meetings and the importance of open technology standards.

You were one of the first ten employees to join OpenFin in 2014. How has the financial desktop technology changed since then?

There has also been an incredible amount of progress around digital transformation as the industry becomes more educated and coalesces around ideas such as common standards and open source. The needs of our clients have changed. We still work with many firms that are just getting started on their digital transformation journey. Others are farther along in the process.

Ultimately, though, our mission has remained the same. The financial services industry is sacrificing efficiency and user experience due to outmoded approaches to technology, and we want to help them prepare for the digital future.

You started working in fintech without any formal education in computer science or technology. Has it been hard to get a deep understanding of the technology and industry trends?

My formal education was in finance, not computer science. I approached the industry from a business perspective, starting as an analyst before moving into a sales/business development role at NYSE Euronext. Now I head strategic client relationships for Europe.

I've made it a priority to invest in myself in becoming a subject matter expert in web technology. Having deep knowledge of web, trading architectures and market structure has always been crucial to my work in interfacing with clients, and that has continued at OpenFin.

What do you do at OpenFin? What do you most enjoy about your job?

I head OpenFin's strategic client group in Europe. Much of my role is engaging with the global banks, asset managers and technology vendors on their digital journeys, understanding their needs and leading industry initiatives. Our customers include Barclays, BNP, Standard Chartered, HSBC, BidFX, Liquidnet.

We grow initial projects into enterprise-wide strategies, which has made OpenFin a foundational layer across financial markets. OpenFin is now used to deploy over 1,200 applications across 275,000 desktops at 1,500 institutions.

I'm also passionate about smaller fintech providers. I dedicate a lot of time to helping these new players break into the industry by helping to coordinate working groups with heads of technology from global banks and facilitating cross-bank collaboration on shared technical challenges. One result from these efforts has been FDC3, an OpenFin-founded organisation that promotes open standards for the financial desktop.

The best thing about my job is meeting talented, diverse individuals from all corners of the industry and helping to solve complex problems through technology.

You're often the youngest person in the room with C-suite executives and the only woman? Has that been



hard? Is the financial services industry's senior management becoming more diverse and reflective of society?

It can be difficult. Providing value, as a subject matter expert or making sure the right resources are in the room, is key. I've definitely made a mental note of some of the more diverse senior management teams I've worked with over the years. There is a high positive correlation between the most innovative players and diversity.

OpenFin is strongly committed to diversity and inclusion and we collaborate to this end where we can. I believe that the financial services industry's senior management is becoming more diverse, and that it will continue to do so.

Has the Covid-19 pandemic accelerated digital transformation among financial services, including desktop technologies and remote working?

The pandemic has greatly accelerated digital

transformation in financial services. Remote work has been a major driver. Apps must be able to interoperate to streamline workflows and compensate for the physical limitations of this new normal.

What trends do you think will dominate 2021 in financial desktop technology?

There will be a sustained push for functionalities that help end users navigate a remote work environment, such as interoperable applications and robust notification centers.

We'll see a continued focus on employee productivity. That will mean an increased emphasis on building more intelligent, contextual workflows to empower the end user with the right tools to quickly access information in times of high stress.

Growth in industry standards and open-source technology will continue. Outmoded approaches to technology are a collective problem, not just an individual one, and firms will take steps to combat it.

Revamping customer lending through partnerships and back-office change



As the acceleration brought about by the COVID-19 pandemic continues, banks across the industry are undergoing a revamp of the way they deal with customers, particularly when it comes to lending.

Rajashekara V. Maiya, vice president and global head of business consulting at Infosys Finacle, says banks are undertaking a great rematching of the journeys their customers must take.

“You can no longer expect your customers to come into the branch and stand in a queue,” says Maiya. “They don’t see that as the basic level of service anymore.”

So, what can banks do? Maiya says they must look at partnerships to provide a reinvention of their lending systems in the short term, while working on technological change in the interim. That change must occur eventually, he says, which is where a good technology partner can help.

Infosys Finacle worked with Bank Rakyat Indonesia (BRI) to launch Ceria, a new digital credit card designed to appeal to millennials. The project followed existing work with the bank on its development of micro-lending service Pinang.

Ceria allows Indonesian users to build their credit history through the card, and has integrations with local e-marketplaces Tokopedia, Dinomarket, and Panorama. BRI claims that most new customers are approved within ten minutes.

Maiya says there are three

layers of the technology landscape through which Infosys assists clients like BRI. These are the back-office business engine and the system of record; a middle layer focused on digital engagement; and a final layer based on digital experience.

Each of these layers is independent of one another, enabling the vendor to target the specific needs of a client. “Say a bank has already implemented a new core banking system,” says Maiya, “but they now want to go digital for customer experience.

“We can offer that layer, but further, we can separate out their needs on that layer. Do they want a mobile app, online banking, or WhatsApp banking? We can enable any combination of those.”

The use of multiple channels across for lending has become the new standard, says Maiya, and is something that banks up and down the tier system are looking at.

“Slowly banks have moved towards offering the same service across multiple channels. The new challenge is offering that same service not just across existing channels, but emerging ones as well.”

Banks must continually assess their business models to ensure they are prepared for the next



big thing, says Maiya.

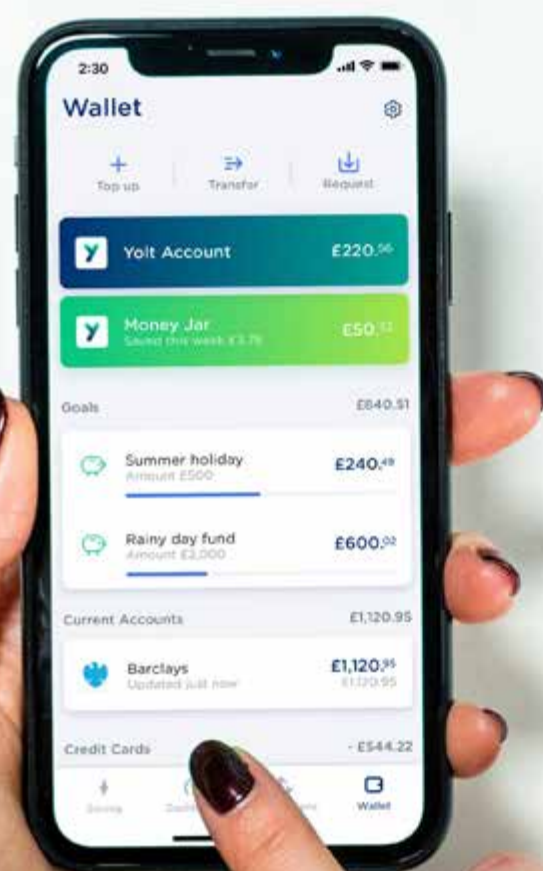
“They cannot just depend on a traditional lending, borrowing and payments business and expect to be a leader in the industry. Everybody has gone into a platform business, and that brings with it the marketplace opportunity for banks to become an ideas export business.”

That platform marketplace model is what Maiya calls “the pinnacle of digital engagement” and something that Infosys brings to the table. The importance of open banking ecosystems cannot be overstated, he adds.

Infosys Finacle has created its own marketplace, available via its platform, which offers access to more than 50 fintech services. On top of that, it enables banking clients to link into non-financial gateways, like booking flights or ordering tickets at the cinema.

Maiya uses India as another example of the changing dynamic of the marketplace. More than 80% of banking transactions in the country are anchored by non-banking entities. In that scenario, Maiya adds, “you cannot stay isolated and try to come out on top in banking”.

Nudge techniques, open banking and smarter personal finance: Yolt's new mobile app



Interview with Pauline van Brakel, chief product officer at Yolt.

Congratulations on winning the Best Mobile Initiative. Tell us about your mobile app, what are some of its main features?

Yolt is a money platform that empowers people to be smart with their money. Since Yolt launched in 2017, it has harnessed the power of Open Banking to deliver a better banking solution to customers by giving them a totally transparent view of their finances, in one central place.

Our app users can see balances and transactions across multiple accounts, keep track of what they're really spending and watch out for upcoming bills. They can set budgets and savings goals, pay friends and family, and even

search and switch to more competitive household bills.

In October last year, Yolt launched an updated version of the app. The app uses behavioral science techniques to help users spend smarter and save. New features include an option to round up purchases to the nearest pound, for example, and automatically put the "extra" money into a "money jar". The money jar feature also offers handy tips and reminders for users to increase their savings. It's trained to recognise and save refunds, salary raises and even bonuses.

How important is the mobile app to your business?

Yolt's mobile app is hugely important to the business. We now have 1.6 million registered users across the UK, France and Italy. Yolt is powered by our company's business-to-business (B2B) arm – Yolt Technology Services (YTS), an open banking provider in Europe.

In 2019, YTS made its

API and platform available to leading financial institutions and ambitious tech businesses as an open banking technical service provider. This tied in well with the requirement from UK regulations for all European banks to make an API available for open banking connections from September 2019.

The market you're in – money management, app-based, is becoming increasingly competitive. What features/technology of your mobile app help it stand out?

The UK fintech sector is thriving. According to research last year by KPMG, the UK fintech sector received \$48 billion of investment in 2019, over 80% of Europe's overall fintech funding.

Yolt recognises that the pandemic crisis has created many additional financial pressures for consumers and therefore consumers need

better solutions to manage these pressures.

One of the new features in the new version of the mobile app is a Yolt card, which is a contactless debit Mastercard. It's powered by the Yolt app. It gets users into the habit of saving, through easy everyday steps with round ups and cashback on selected brands.

The Yolt Card works alongside the virtual Money Jar to help users get into the habit of saving.

Yolt is a venture of ING bank. Has being owned by a big bank helped Yolt grow its mobile app and business? Do you try to combine the nimbleness of a start-up with the stability of a corporate?

As a venture of ING, we have benefitted greatly from the business' market know-how, expertise and continued support. ING's support has been integral to helping

grow the Yolt business to what it is today, serving 1.6 million registered users in just under four years. We can balance this with the agility of a start-up as a relatively small organisation, with big ambitions across Europe.

What are the most important trends in mobile apps in your market for in 2021 and beyond?

Covid-19 has hugely accelerated the expectation for financial services to be completely digitalised, so the adoption of personal finance apps and online banking are likely to increase. Likewise, the consumer expectation for the same seamless experience that tech giants

such as Amazon and Apple offer has trickled into the financial services sector.

The post-Covid economy may also bring greater adoption of open banking services. Demand will come not only from consumers looking for digital tools to help them manage their finance but also from businesses who will be looking at how to reduce business costs, offer a seamless customer experience and a safe and secure method of handling payment data. While any investment during a period of economic uncertainty may seem risky, those adopting open banking during this time will be able to capitalise

on the sharp increase in consumers using online services.

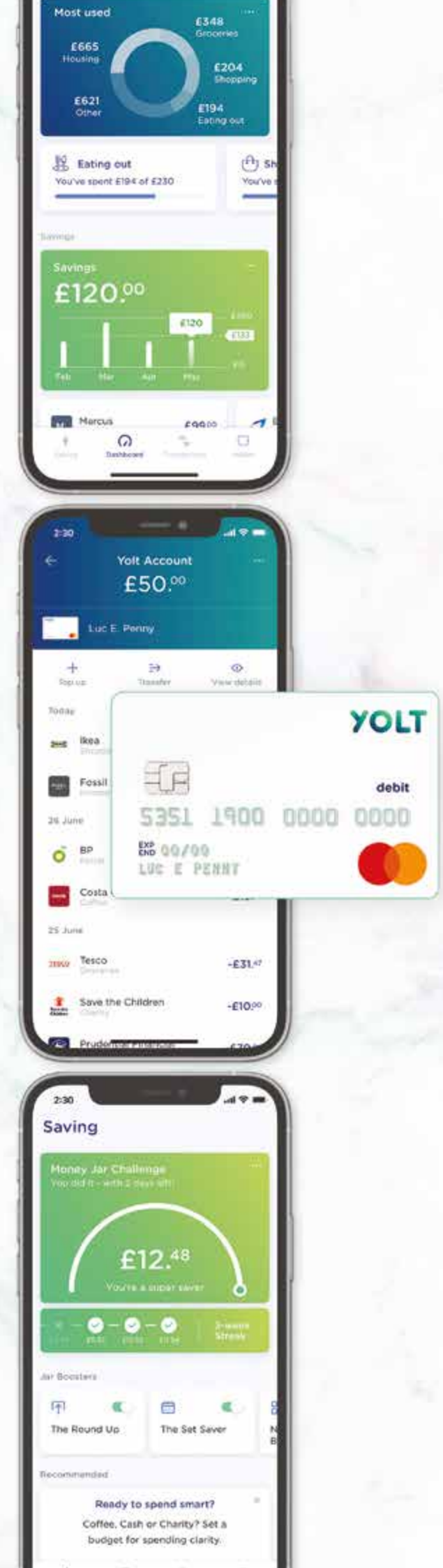
It's not just money management tools consumers are turning to in lockdown. UK consumers may feel more comfortable with online processes, such as mortgage applications, sharing account information, and executing transactions digitally.

This could pave the way for a truly open financial system in the next few years, with consumers and businesses able to access their entire financial footprint, from mortgage applications to bills and smart meter readings, in one place.

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All together now



How UBS's innovative hub helped 60,000 work remotely with virtually no downtime during the pandemic – interview with Nej Adamian, head of digital engineering, UBS Group Technology.

Last year, 95% of your organisation started working from home, almost overnight, due to the Covid-19 pandemic. What were the challenges of doing this?

Remote work was already an integral part of UBS's way of working before Covid-19 so we had all processes and systems in place. When the pandemic struck, past investments paid off as we were on the last mile to implement what we call "A3" – anytime, anywhere, with any device. We accelerated the closure of implementation of A3 and provided a secure and fast infrastructure for remote working for over 95% of our staff via our "My Hub External" website.

Working from home as a mass experience had of course a substantial impact on our systems. For example, we have about 60,000 people working remotely at the same time, making about three million calls globally each week. Our systems remained stable and resilient. We even saw record stability in some of those months.

When we shifted to working

from home, it was during a time of high volumes and volatility in our financial markets. Thanks to the stability of our IT, we successfully managed March's high volumes and activity across our trading and client platforms enabling us to gain market share and share of wallet with our clients in the first quarter of 2020.

What is UBS's My Hub External. What tech does it use?

My Hub External is a website we developed for our 70,000+ employees who work all over the world. Its purpose is to allow employees to access the tools they need while they are all working remotely. For example, if an employee is locked out of their account because they've forgotten their password, the My Hub helps them reset their account securely. They can do this without having to call an IT helpdesk or needing access to the bank's secure network.

The site also has diagnostic tools which can detect whether an employee is having technical issues with their computer, such as if software needs updating. The tools meant that we have



experienced very little IT downtime during remote working, meaning colleagues could spend more time on clients during the pandemic.

The hub's technology leverages several services within Microsoft's Azure Cloud including: Azure Functions, Key Vault, SQL Database, WebApps and application insights. The hub also uses proprietary technology developed in house by our UBS Digital Engineering team.

How did you adapt the My Hub External to support the surge in remote working?

Pre-Covid, the site was a concept under development as part of a suite of services. When it became clear that most of UBS had to start working remotely, we immediately accelerated the development of the tool.

The speed of deployment was the biggest challenge. We were able to roll it out quickly by using cloud technologies.

We worked to make sure that the tool was as simple to use as possible. We had to consider design of the service to meet massive spikes in demand during peak times – which the cloud is perfect compared against on-premise alternatives. As we built the product natively in the cloud, we adopted our testing strategy accordingly – to ensure that it

is secure and compliant with regulations.

Alongside the hub, we also provided support and training for our employees to help them work from home, including an app for mental health.

What have been the main benefits of My Hub External?

My Hub External is built for remote working. The hub's benefits include, being a single page that gives users an overview of their remote working capabilities and health of their personal devices based on UBS standards and enabling users to self-service their IT and other needs.

Has the Covid-19 pandemic accelerated digital transformation among financial services, including desktop technologies and remote working?

The pandemic has increased digital savviness in general. Every

aspect of private and business lives was impacted – shopping, chatting, banking. According to several surveys, the pandemic has accelerated digitalisation by three to four years. We expect this trend to continue and see a boost especially for automation and technological capability (stability, cloud, remote working), digitalisation on the client side and working from home after the pandemic as more employees will want to work partially and more flexible from home.

Do you plan to develop the hub over the coming year?

As with any digital product, the tool is constantly being improved for performance and design and is having new features and capabilities added. As remote working appears to be part of the "new normal" around the world, the tool will be here to support our employees.



"The cloud is an essential part of our strategy. Our work on My Hub is a perfect example – our ability to seamlessly pivot to remote working helped UBS colleagues focus on delivering throughout the pandemic."

Mike Dargan, group chief information officer, UBS

Strands: Opening up banking and account aggregation services



Strands' Open Hub was launched in 2017. It's used in more than ten financial institutions in the UK, Europe, Asia and Latin America. We talk with Claudio Cungi, head of product at Strands.

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Strands' Open Hub platform "provides banks with a single interface from which to connect to external services in an easy and secure way".

What kind of services does this include?

Connecting external services to their financial management platform allows banks to enrich their 360-degree view of their customers.

Open Hub acts as a meta-aggregator, by connecting to third-party account aggregation providers such as CRIF's Account aggregation service, which act as Strands' partners in different geographies.

We also provide account invoice aggregation services. Open Hub connects to most widely used invoice management tools, including Quickbooks, Xero and Sage, to

get additional information about invoices and bills through the business financial management (BFM) solution. This way, banks get a more realistic picture of the finances of their customers' businesses.

We also provide bank feeds services. Open Hub connects to the same invoice aggregation services to facilitate the information about the bank accounts into these tools.

In the UK, Strands' AI-based BFM platform has been authorised by HM Revenue & Customs to manage and submit digital tax returns in the UK on behalf of organisations. Banks can use our white-label fintech software help UK small and medium-sized businesses (SMBs) keep on top of their finances.

How does Open Hub help banks and their customers?

It gives banks and enhanced view of their customers by taking into account both internal, such as their customer's bank account transaction data, and external

information, such as financial transactions the customer has in other bank accounts and other financial information held in accounting software used by the customer, for example in Quickbooks or Xero.

Open Hub can put customer transactions into different spending categories, such as groceries, home apparel, restaurants etc, using Strand's AI-driven software. Each bank has its own categorisation systems. Open Hub lets a bank's customer with accounts in more than one bank can see all their transactions categorised following a common style in a single platform. These could be recurring payments in a separate business account or expenses on a shared account.

Finally, Open Hub can integrate with all IT systems and apps used by banks. It does this by using Application Program Interfaces (APIs that meet international standards, such as the OpenAPI Specification (OAS). Open Hub eliminates the hassle of

managing third-party APIs and offers a unique API that makes dealing with each of them seamless

Why did you build the hub?

Strands' money management solutions try to provide banks with a full overview of their customers' financial situation. For this reason, it is essential to connect the information of the user that is held outside the bank. Maintaining external connections is always a challenge and an extra effort that depends on a third party's roadmap more than your own.

This is why we built an interface that allows banks to connect their online banking applications with third parties but that remains fully independent. This way, a change in the third party's software or API won't compromise in any way its connection to the banking platform. This makes maintenance so much easier.

How does the technology use "open banking" technology standards?

The continued effort behind Open Banking reform means that banks and financial institutions, using APIs, will

have to open up and allow the sharing of a customer's financial data, such as spending habits and payments, with authorised third-party providers.

Open Hub is a simple interface that leverages third-party connections, i.e. Open Banking, to connect multiple external services securely in one place. It helps banks create new revenue streams from the distribution of services over third parties.

We partner with third parties such as invoicing providers (Xero, Quickbooks), Oracle or Mastercard to

generate new opportunities to accelerate the bank's innovation efforts, enabling its complete digital transformation and using artificial intelligence to create personalised and contextual offering for their customers and bring new products and business models to market, such as a cloud version of its personal finance software or an integrated platform of digital cash management and commercial payment tools specifically designed to benefit banks' small-to-medium enterprise (SME) customer base.



Tailor made: TMRW – the digital bank for ASEAN’s young professionals

Interview with Kevin Lam, head of TMRW Digital Group.

Why did you design a digital banking service aimed at young professionals?

The market for millennials in Southeast Asia is particularly important for TMRW [pronounced “tomorrow”], whose parent company is United Overseas Bank (UOB). We’ve estimated that it could be worth SGD 10 billion (\$7.5 billion) in revenue over the

lifetime of a young ASEAN professional.

Our target segment is young professionals and young professional families in ASEAN. Based on our research, we found that they are digitally advanced, dislike complex, universal and opaque banking and would prefer a friend who understands them, rather than a traditional bank. Building a digital bank that

catered to their needs was the next logical next step.

What are some of the most important and innovative features for the new banking app?

TMRW is a digital, mobile-only proposition with no bank branches. However, customers still need to withdraw cash from time to time. As such, we have leveraged our partnerships to allow customers to access

all banks’ ATMs in Thailand and Indonesia to withdraw cash for free.

Our app includes a feed of financial updates, advice and information, in a = similar format to Facebook or Instagram. The feed is a series of “cards” that give personalised financial updates to the customer, such as a reminder to pay a credit card bill, the customer’s spending in a month or an unusual charge in the banking transactions. TMRW uses technologies including artificial intelligence (AI) and data analytics to analyse customers’ financial data to provide them with personalised content.

Other innovative features of the app include gamified savings which encourages

good savings behaviour and real-time expense tracking – which just exited Beta and was designed to help customers curb impulse spending.

How long did the service take to develop and when was it launched?

We began working on the idea in 2017. We launched TMRW Thailand in March 2019 and in Indonesia in August 2020. Our learnings in Thailand meant we were able to launch quicker in Indonesia. In the long term, we aim to expand across South East Asia.

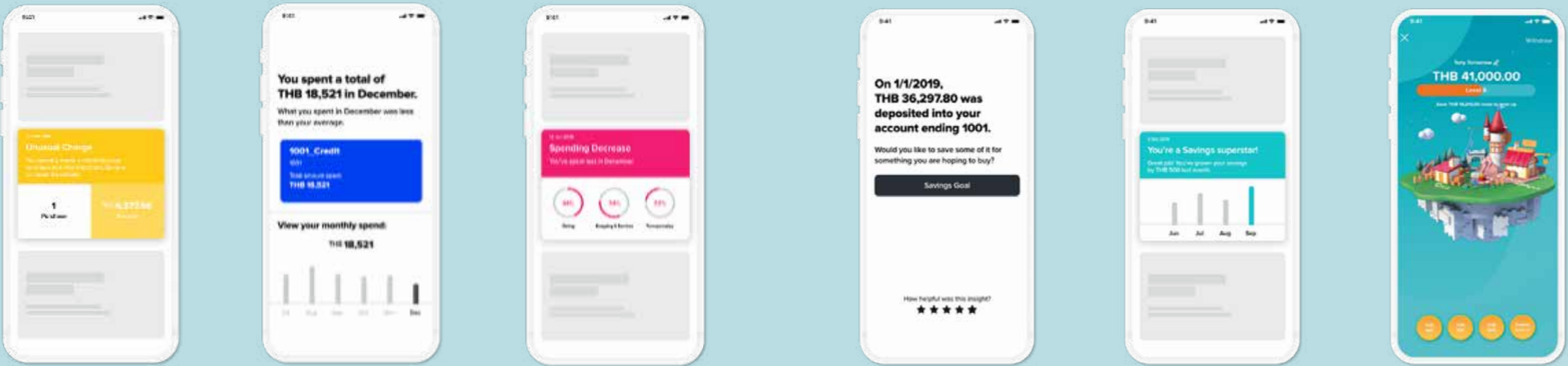
What technologies does the banking app runs on? Did you develop them in-house?

We developed most of

the technologies in-house, leveraging UOB’s existing technology assets. We also partnered with fintechs, including Personetics and Meniga, to lower the cost of producing innovative technologies and services.

TMRW has been built on a modern microservices architecture which provides us the flexibility to adapt quickly and to scale the platform. We integrate rapidly using APIs with best-of-breed fintechs as well as our own in-house core banking systems. TMRW has leveraged the wider UOB investments in data and analytics infrastructure. This has enabled us to build out advanced data and data science solutions very rapidly.

What were the main





Kevin Lam, head of TMRW Digital Group.

challenges when developing the banking app? How did you overcome them?

Given the diversity of the different ASEAN markets, we had to consider the regulatory differences in both countries we launched the app in. We needed to comply with regulations while meeting our aim of simple and intuitive customer experiences, including the onboarding of customers.

When onboarding a new bank customer, it's important that we are able to validate the customer's identity without having the customer take time out to visit a bank branch.

In Thailand, we used the country's national ID database, facial recognition and fingerprint matching technologies to verify customers' identities. TMRW is the first bank in Thailand to

offer both forms of biometrics to enhance the account opening experience.

Local regulations require face-to-face video calls in Indonesia. After studying the customer experience we realised that connectivity and bandwidth was an issue. We moved from full two-way video conferencing to a text-and-video mix to minimise the drop-calls and data usage for our customers. This onboarding method was timely as customers are able to onboard from their homes in less than seven minutes during the Covid pandemic.

What have been the benefits of the new banking app for customers? How have you measured its success?

Net Promoter Score (NPS) is a key KPI we track to measure customer satisfaction.

In just a under two years of operations in Thailand, a market with one of the highest digital banking standards in ASEAN, our engagement-focused business model is bearing fruit. In the most recent survey conducted by Bain & Co in January 2021, TMRW is now second in the market with an NPS of 40 and is ranked number one for credit cards and for current account/savings account.

Based on our monthly customer assessments conducted internally, we have achieved a high NPS of more than 60 since our launch in Indonesia. Our Indonesian customers are also highly engaged. A recent TikTok campaign to encourage better spending and saving habits among millennials received about 1.2 billion impressions in less than a month and more than 7,000 submissions from consumers who pledged to spend and to save more wisely.

TMRW has received 26 industry awards, including Best UX / CX in Finance Initiative from the Banking Technology Awards, Best Digital Bank (ASEAN) and Best Bank for Millennials from the 2020 Global Retail Banking Innovations Awards by the Digital Banker.

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Best Bank for Millennials 2020
Global Retail Banking Innovation
Awards by the Digital Banker



Best Initiative in Innovation
The Asset ESG
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Spreading the risk for P2P investors



Israel-based peer-to-peer (P2P) lending specialist, BTB, has a business model that has brought annual average returns of seven per cent in the last seven years with low defaults. Part of its success is a technology platform called B-Match that rebalances and recalculates the investors' portfolios on a daily basis across all of its loans.

BTB stands for “Be The Bank”, reflecting its intention at launch in 2014 to directly link investors to borrowers on P2P basis, cutting out the banks. It has an interesting, risk-averse model whereby investor funds are spread across all BTB borrowers (currently each investor holds more than 800 different loans in their portfolios).

In addition, 1% of all deposits and returns reside in a mutual guarantee fund which is used to reimburse the investors for the original investment and interest if any borrower defaults. BTB only accepts around nine per cent of its SME borrow applicants as a result of technology alongside a team of analysts to verify their suitability. Therefore, defaults are rare. Add in the mutual guarantee fund and this effectively means zero

defaults from the investor perspective.

The company was a pioneer in the Israeli market with its P2P offering. “We had to teach the market, it was very challenging, there were a lot of strange and sometimes hard questions to answer, we were – and still are – changing the way people and businesses perceive economics,” says co-founder and co-CEO, Alon Katz. BTB was established with the aim of, on the one hand, resolving the credit crunch of small business owners and, on the other, offering investors a profitable and stable investment with social value. It now has thousands of investors including private individuals, companies, municipalities, investment houses, family offices and even some Kibbutz funds.

Investments can be for any amount; usually loans are up to ILS1 million (€250,000). BTB’s platform spans all aspects of P2P, including tax and fees, with graphical displays of an investor’s portfolio by sector, amount invested (with the ability to have sub-users, such as children), interest, accumulated net interest and investment forecasts of up to 60 years. “From the first day, the investors love what they can see,” says Katz. “As well as excellent customer service that provides investors with the information they seek, we provide lots of data to investors in the digital personal area to be as transparent as possible.”

Initially, an investor’s funds would only be allocated to news loans from the day that investor arrived as a client. As a



result, sometimes a single loan could form a relatively large proportion of an investor’s portfolio. Despite the very low default rates and the mutual guarantee fund that effectively cancels out the defaults, that situation brought a perceived element of risk. “We wanted everyone to be as safe as possible,” says Katz.

Its technical solution to this issue is called B-Match. This divides all investors’ money dynamically and automatically across all existing loans. The first version of B-Match did this using calculations created by BTB’s staff. The current version, launched in 2020, does it automatically, using an in-built smart algorithm, on a daily basis.

This model means that currently an average of less than 0.1% of each investor’s money is allocated to a single business loan. This amount

decreases every day when the B-match system scans the entire pool of existing loans and reshuffles all portfolios to have the smallest portion possible in each of the loans. In this way, it achieves the biggest possible diversification for each portfolio and means every investor, regardless of size, has the same level of return.

“The use of the B-Match technology has made the investment in the platform safer for every investor, large and small,” says Katz. It is part of the success story that has seen BTB double its business each year since launch and provide its investors with average annual returns of seven per cent. The platform has gained almost ILS800 million (€200 million) in investments. That default protection model, which Katz describes as the

“fifth line of defence” after all the others including having a guarantor for each loan, means BTB can boast a 100% rate of loan repayment. Despite the many challenges of 2020, BTB’s default rates at the end of the year were lower than at the end of 2019.

BTB’s team of 30 staff comprises specialists in risk assessment, legal and regulatory compliance, government relations, IT, marketing and other areas. There are around 600,000 SMEs in Israel and this number is increasing very fast, says Katz, so there is plenty of scope for further growth in its domestic market. However, “what we did here in Israel, we could do anywhere” with what he feels is a unique business model. So international expansion is planned. “A few countries are in our sights now, it won’t be tomorrow, but it is not so far ahead.”

Innovation to drive positive change

Chuah Wan Pin, CEO at Infopro Digital Banking, says that leveraging technology and processes has brought about tangible benefits for banks.



Infopro artificial intelligence (AI) driven digital banking platform is a banking system that has customer centricity via digital transformation at its heart, explains CEO, Chuah Wan Pin. “The solution moves core banking into the next generation. It is built for modularity allowing an API [application programming interface] enabled ecosystem, has reduced processing times and is also in the cloud, providing in demand scalability.

“We aim to free our banking customers up to focus on their own business growth and with the knowledge that the underlying banking system is a capable partner,” he says.

The solution is aimed at existing banks looking for digital transformation, as well as new digital

challenger banks. To date, there have been over 100 implementations in 32 countries that include banks that might have just one branch right up to those with branch networks numbering the hundreds. The biggest customer has 1,000 branches.

“The past two years have seen a particular focus on digitisation and everything that comes with that in terms of improved processes automation, sleeker systems and overall better customer experience in terms of the design and function at the front end,” says Chuah.

AI

A key facet to this has been bringing efficiency and power via the use of AI and machine learning (ML) with a mission of bringing cognitive digitally

AI-driven Digital Banking Platform

Customer File

General Ledger

DIGITAL

Agents	Bankers	Customers		
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Digital Dealer		E-wallet	Chatbot	Watch Banking

CORE BANKING

Conventional		Islamic		Payments
Loans Origination	Deposits	Financing Origination	Deposits-i	
Loans Management	Trade Finance	Financing Management	Treasury-i	Card Solution
Debt Collection	Treasury	Wealth Management-i	Litigation	
Litigation	Wealth Management	Trade Finance-i	Ar Rahn	

RISK & COMPLIANCE

Enterprise Risk Management	Asset & Liability Management	Regulatory Reporting	
Anti-Money Laundering	AI Credit Scoring	Compliance Management	Fatwa Management

ANALYTICS

Business Performance Analytics	Customer Analytics	Visualisation Tool
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Artificial Intelligence

Data Analytics

Cloud

Open API

Beyond Banking

enabled solutions powered by AI and machine learning to transform the banking processes.

The anti-money laundering (AML) function has been one beneficiary of this with AI-powered AML solutions having a significant impact on reducing false positives. Intelligent customer profiling has also served to effectively identify high-risk individuals and reduce false negatives.

AI credit decisioning, meanwhile, now uses automated financial document upload and information extraction via AI-based optical character recognition (OCR) and has an AI Scorecard Builder that automatically builds a credit scorecard customised to a bank's customer data.

This makes for a more granular breakdown of credit worthiness factors and better accuracy.

Customer analytics and intelligent segmentation is a third area. The AI allows banks to segment and develop better customer acquisition and retention strategies such as cross-selling/up-selling products and services using hyper-personalised marketing communications.

Many other banking solutions and processes have also been embedded with AI. Chuah comments: “The intention is to have AI woven through the platform and extending to each and every module feeding back into the core. We’ve been happy to see significant improvements to our offering in the spaces

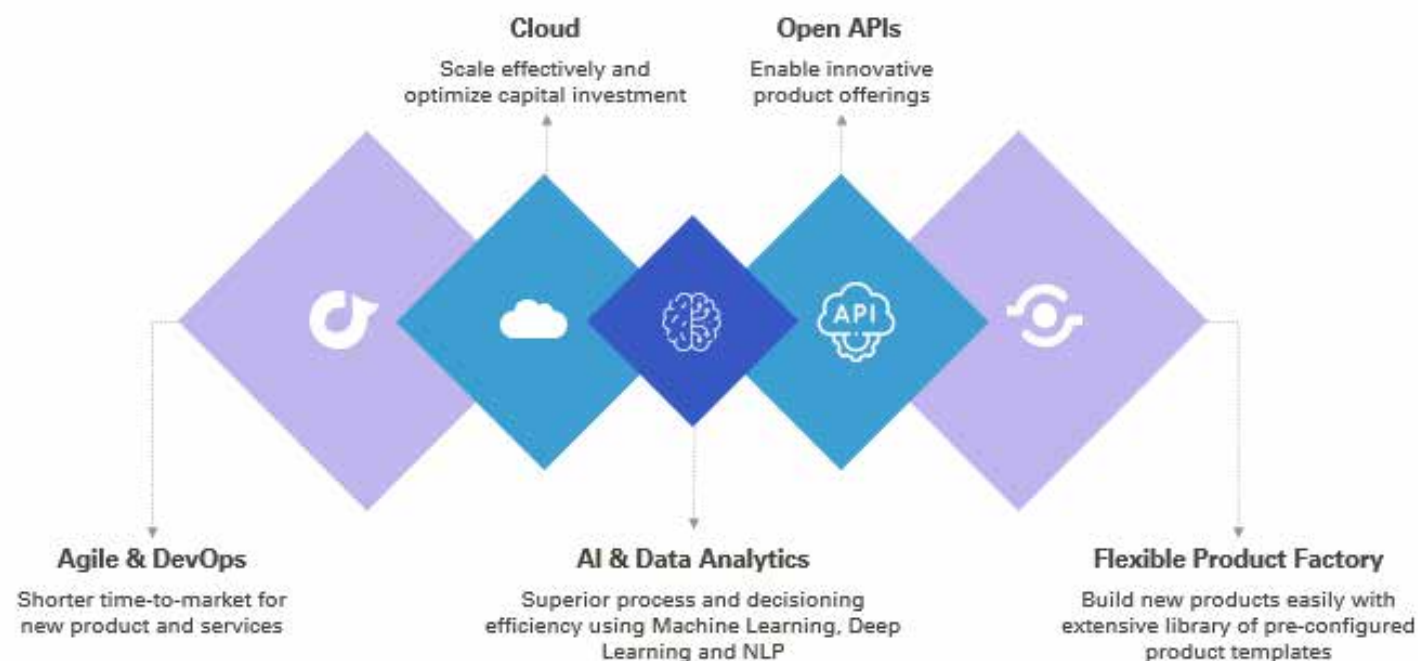
where we have applied AI and ML – we’ve made processes frictionless and quicker for our customers and theirs too.”

Innovation, says Chuah, is at the heart of the firm's efforts and it is very process-orientated, having been appraised at CMMI level 5 (Capability Maturity Model Integration) as well as being ISO 9001 certified.

Partnership

Being able to pivot and respond to opportunity and change within the market – evolving with it rather than lagging behind, is supported by a partnership approach.

“We see our customers as partners and the ethos is one of working together for a common aim – to prioritise customer centricity and



make the bank's processes measurably more effective and efficient. That way they can be more customer centric with their own end clients. In this way, innovation can be shared and experiences drawn upon and the whole process is enriching, rather than a simple commercial exchange of services," says Chuah.

A key element to customer centricity is that over a third of staff come from a banking background. This is something that the company has deliberately engineered so as to have the right blend of industry experience; from retail and corporate banking and their various specialisms, all working to underpin the actual product offering and meet customer needs.

The same partnership ethos is applied to tech partnerships and here Chuah says that in an ecosystem led world there is the need as well as the desire to draw from the experience and the best practice of others. "We are always interested in solution that would add value and be easy to integrate into our offering," he says.

Going forward Chuah says that COVID-19 has undoubtedly sped up everything that is digital. "2021 will see an extension to AI and ML capabilities and we want to move further into the digital space to be ready to support a full digital bank. We move with the market we don't just respond to it after the fact," he says.

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Building trust in investing with AI



Japan's digital-only bank, au Jibun Bank, is seeking to rebuild consumer confidence in investments with an AI-driven market forecasting capability within its banking app.

The stated corporate mission of au Jibun Bank when it launched as the first mobile-focused bank in Japan in 2008 was to “Become the closest bank to every one of you”. This was reflected in the name of the bank – Jibun means myself in Japanese (the ‘au’ prefix was added last February to reflect the brand of its co-parent telco, KDDI; its other parent is MUFG Bank).

A new feature for its banking app, released in May 2020, furthers that goal. AI Japan Market Forecast combines economic indicator figures, stock market price index figures and AI technology into a simple user interface. It is a free service for the bank's account holders.

That capability follows on from two AI-based foreign currency savings services, for forecasting across five currencies and for auto-execution in five currencies. For these, as well as the latest app, the bank worked

with Japanese AI specialist, AlpacaJapan Co. Ltd. MUFG Bank is one of the shareholders in the company.

According to the Japanese Government, Japanese households lack interest in investing in financial instruments, preferring deposits and savings and lacking the understanding of the effectiveness of long-term diversified investment in other financial instruments. The Financial Services Agency noted in its 2016 report that savings and deposits accounted for around 52% of Japanese households' financial assets (compared with 24% in the UK and 14% in the US). There is a deep-seated distrust among Japanese people towards the stock market due to the after-effects of the bubble economy, which collapsed in late 1991.

“We believe the improvement of education for investors is a basic element for encouraging

more people to invest in risk assets, or even to start thinking of asset building for their sustainable future,” says Chisato Nakamura, manager of the Innovation Business Division at au Jibun Bank Corporation. It is important to promote the provision of information on financial instruments in an easy way for individuals to understand, so that they can make straightforward comparisons with other products. The new app capability is part of that journey.

AI Japan Market Forecast covers five-day and one-month forecasts for the Japanese stock market (TOPIX), with daily and monthly updates respectively, with graphical representations. The artificial intelligence (AI) technology extracts the characteristics from daily charts and searches for similar scenarios from the previous three years.

For the daily forecasts, after identifying ten similar scenarios, an average range of future returns is calculated by stock price increases or decreases. This is then compared with ten-year historical back data. Depending on where the daily

figure sits historically, certainty levels are defined about future stock prices for five days. Users can check the certainty via a simple colour-coded bar chart UI.

For the monthly forecasts, the engine analyses the most recent PMI index, for both manufacturing and services, together with the TOPIX movement of the recent month. The combination of whether PMI shows above or below 50.0, where 50.0 represents a no-change or neutral point, and the percentage change of the monthly stock price, based on

its closing price, is allocated into eight patterns in a simple indicator pie chart.

“This combination of AI, good old economic indicators and stock market prices in a single banking app screen and UI means this is not just for investors but also for those who have not yet started to build their assets for their future,” says Nakamura.

Users can then act on the information. There is a link from the app to investment services run by online brokerage, au Kabucom Securities Co., Ltd., which belongs to the same au Financial Group (KDDI) as au



Jibun Bank.

What has been the uptake? Since its launch in May 2020, the number of monthly average page views has been 40,000. The percentage of correct daily forecast ratios was over 64 per cent for the latest quarter (October to December 2020). As the AI engine improves by analysing charts accumulated on a daily basis, the accuracy is expected to improve by learning the market.

One of the most difficult challenges for au Jibun Bank, says Nakamura, was to gain the agreement of their business partners to refer to their indices together with AI. It was a new concept and there needed to be

discussions to explain how the AI technology would work and how important it is to enhance customer experience in financial markets.

For the future, outside of the AI Japan Market Forecast capability, au Jibun Bank is planning to implement a user-friendly AI-enabled feature on its banking app to recommend investment trusts to its retail customers. Through AI, the recommendations will be tailor-made for each customer.

"We believe the AI utilisation helps to lower the barrier people feel towards investment activities, especially by implementing cutting edge technologies into their smartphone app," concludes Nakamura. "As the first digital bank in Japan purely focused on the mobile channel, we will accelerate our innovations to support our customers' investment activities and to support asset-building along everyone's lifelong journey."

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Pragmatism in the face of the pandemic



An innovative approach, repurposing a tool originally designed for testing, brought a way forward for AFS customers when faced with the urgent need to accommodate the US government's Payroll Protection Program (PPP) scheme for small business emergency relief loans.

The US government's Payroll Protection Program (PPP) in response to the Covid-19 pandemic brought a lot of challenges for banks. There was the need, at short notice, to approve, fund and book thousands of small business emergency relief loans.

As a long-standing market leader in commercial lending and risk management solutions for financial institutions, Automated Financial Systems Inc. (AFS), of Exton, Pennsylvania, looked at what could be done to meet the challenge.

"There was obviously a lot already going on when this package came out," says Melissa Hofer, AFS's EVP, chief product officer. The banks were having to set up remote working for their employees and there were all of the human-level

challenges.

This was added to when Congress in late March passed the Coronavirus Aid, Relief and Economic Security (CARES) Act, a \$2.3 trillion package of programs to provide fiscal stimulus and relief in response to the pandemic. PPP was one of those programs. In total, \$349 billion was made available in "forgivable loans" via PPP to small businesses. The loan terms were the same for all recipients. The loans were to cover payroll costs and most mortgage interest, rent, and utility costs over the eight-week period after the loans were made.

PPP was welcomed as a way to help small businesses and restart the economy but there were a lot of grey areas, says Hofer, with open questions at the start around

the timing and processes. It was also difficult for banks to predict the volumes and when the funding would run out.

All of the loan applications needed to be funnelled to the US Small Business Administration (SBA) for approval, with uncertainty over how long that would take. It was then up to banks to disburse the funds.

The program was in place and operational on 3 April, only seven days after being created, and demand for PPP loans was predictably huge. Funding ran out after less than two weeks, during which time 1.6 million loans were approved. The program funding was increased by a second injection of \$310 billion on 24 April.

"Banks really rose to the occasion," says Hofer. The focus was all about

the clients, including new ones, with a commitment to ensuring that PPP was a success. "It was very rewarding for AFS to be a part of that. We always had it in the backs of our minds when we were working weekends and to midnight."

Multiple clients, including one of the largest 15 banks in the country, asked how AFS could help. In the ten days between the PPP scheme being created and the day it began accepting loan applications, that large bank expected to be flooded with thousands of applications from small businesses in financial distress.

AFS and its clients formed a joint team of technical and operational analysts.

A number of options were considered before it was suggested that a tool used to upload massive numbers of fictitious loan accounts for test purposes could be adapted for use in uploading approved PPP loan applications. "It was not without its challenges and it had not been used on this scale before but we thought, let's give it a try," says Hofer.

The tool took in files from the banks containing the requisite fields for the loans. It then uploaded and booked them at once into AFS's flagship AFSVision servicing system where disbursement to borrower DDA accounts followed simultaneously. This one-step process bypassed the system's

regular requirements for workflow and control, which under normal circumstances would involve each loan being booked and funded separately. By using this tool, AFS customers were able to expedite booking and funding. In the case of the top 15 bank, this was for more than 50,000 PPP loans. This took a matter of minutes, a fraction of the time it would have taken under regular processing operations. This meant that the banks were able to provide fast and responsive financial assistance to businesses in need.

At that top 15 bank, the first PPP loan was booked using the test tool on 9 April. It took a week to turn



the whole procedure into a smooth working rhythm, during which 86 loans were booked. On 20 April, the bank used the tool to book and fund more than 1600 loans in a single day. Over the following three weeks, the bank added over 40,000 more loans, an average of 2666 loans per business day.

Without the tool, with a typical booking time of ten minutes per loan, it was estimated that 40,000 loans would have taken 6,666 man-hours to finish. This would not only have delayed the availability of much-needed funds to small businesses but would also

have involved an enormous expense of resources and time to the bank. In addition, the tool ensured that data integrity was maintained through the booking process and reduced the risk of human error.

The tool is not intended to be for every day use because it was only the guarantee from the SBA on these loans that meant the built-in workflow management and control mechanisms of AFSVision could be bypassed. Nevertheless, says Hofer, AFS is now looking at lessons from the entire process and potential core system enhancements to

support these types of programmes. This would be for future PPP or similar relief programs – she points out that there are other reasons for relief programs, such as natural disasters.

There was an element of “bubblegum” about the rapid, repurposing of a tool built for a totally different role, concludes Hofer, but it worked. These were exceptional times and flexible, “out-of-the-box” thinking, plus long working days, produced the right result – for the banks and for their customers at a time of great need.



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