banking technology

The definitive source of news and analysis of the global fintech sector | **March 2022** www.fintechfutures.com

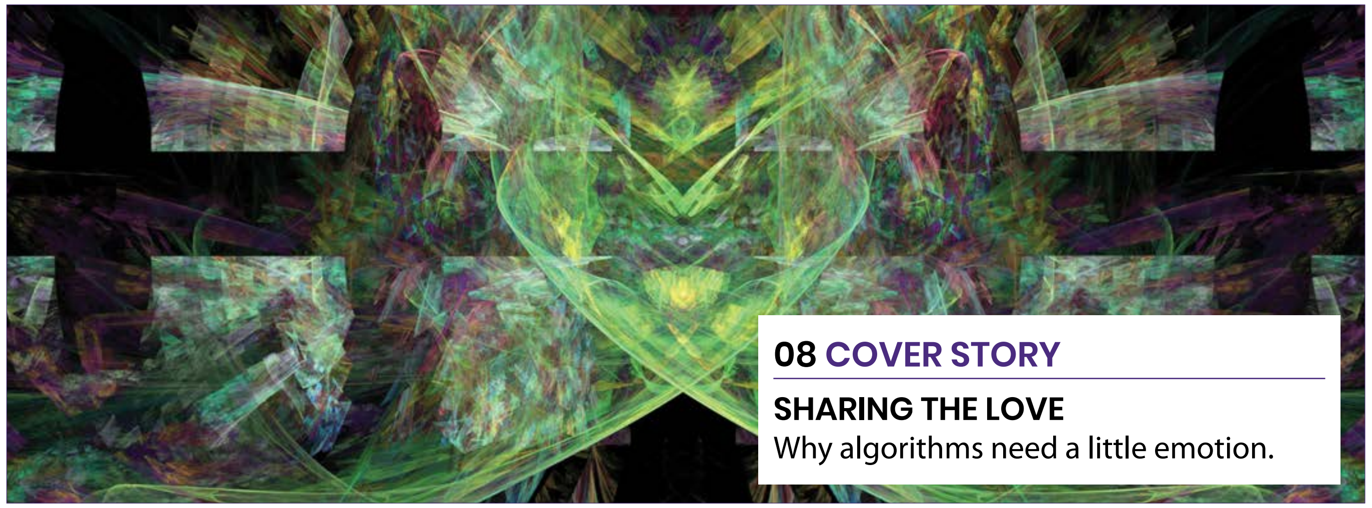
HAVE A HEART
Injecting a little love into AI

CLIMATE CHAMPIONS
Uncovering the US's first climate-focused community bank

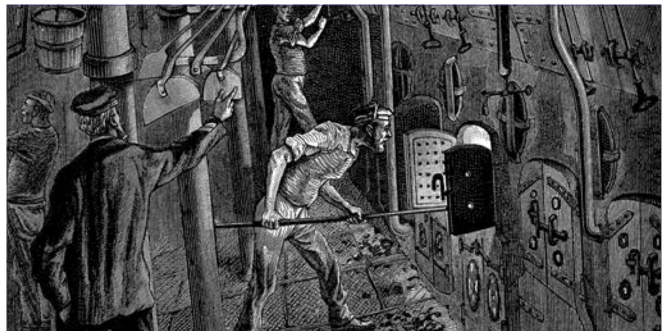
DON'T FORGET BOB
Humans are still needed for most of the banking grunt work

Produced by FINTECH FUTURES

IN THIS ISSUE

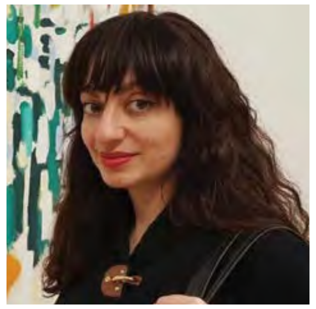


FEATURES



REGULARS

EDITOR'S NOTE



Tanya Andreasyan
Managing Director & Editor-in-Chief,
FinTech Futures

The March edition of the magazine is, as always, full of fintech and banking tech goodness, including the top news, punchy opinions, food for thought, expert analysis and lots more. And, as always, we hope you find it interesting, informative and useful.

Yet, instead of welcoming the spring and new beginnings, it is published at the shocking and deeply saddening times of the conflict that has taken hold in Ukraine.

We are seeing a human tragedy of significant proportions, with well over a million people having already fled the country, seeking help from neighbouring communities and governments.

While we all hope for a de-escalation, as of the time the publication of this *Banking Technology* magazine, the path to a pause in fighting and ultimately to peace is not yet clear.

Local and international tech communities have come together to help those in need through this crisis, both as individuals and on company levels. Our strong support goes to those trying to help these communities and find a path to peace, and our thoughts go out to everyone impacted by these terrible events.

NEWS ROUND-UP

Pakistan's largest bank in major tech overhaul

Habib Bank Limited (HBL) in Pakistan has selected Temenos' flagship core banking solution, Transact, and auxiliary products to its support conventional and Islamic banking business lines at HBL, underpinning "a full suite of client-friendly products and services", the vendor says.

Muhammad Aurangzeb, president and CEO of HBL, says the initiative contributes to the bank's goal to become a "technology company with a banking licence".

The project involves an integrator – NdcTech – a long-standing partner of Temenos in Pakistan. It is understood the new system will replace the legacy Equation solution from Temenos' rival, Finastra. HBL is a broad client of Finastra. It uses its trade finance and treasury solutions in addition to the core tech, *FinTech Futures* understands.

HBL is Pakistan's largest bank, providing a broad range of services to individuals and businesses. It has over 23 million customers, a network of 1,650+ branches and 2,100+ ATMs, presence in 14 countries and 20,000+ employees.

Digital bank Grasshopper relaunches with focus on SMEs

New York-based neobank Grasshopper has overhauled its digital banking platform as part of a renewed focus on start-ups and SMEs. As part of the relaunch, Grasshopper has brought in a new leadership team and implemented a new technology strategy.

Key hires include Mike Butler as CEO; Pete Chapman as chief technology officer; Grant Skeens as chief risk officer; and Chris Tremont as chief digital officer. It has also signed deals with tech firms including FIS, Treasury Prime, Narmi, Alloy, Hummingbird and Autobooks.

With total assets of around $300 million, Grasshopper now supports small businesses, venture-backed companies, fintech-focused Banking-as-a-Service (BaaS) and commercial API banking platforms, small business administration lending, commercial real estate lending and yacht financing.

LHV Group acquires EveryPay, applies for UK banking licence

Banking and financial services firm LHV Group is set to acquire fellow Estonian company EveryPay in a share exchange transaction. LHV will acquire all the shares in EveryPay for €8 million, while EveryPay shareholders will receive new shares issued by LHV.

EveryPay is a payment gateway platform that connects banks and e-commerce companies with modern payment methods. It claims approximately 70% of Estonian online card transactions – processing more than 15 million payments that exceed €800 million every year. Post-acquisition, LHV expects this volume to increase sixfold in five years, with fee and commission income increasing by 18 times.

Also, from 2023, the company anticipates being profitable every year, with profits reaching €7.5 million by 2026.

In the UK, LHV has applied for a banking licence for its subsidiary LHV UK and signed for a new core banking system, supplied by another Estonian tech firm, Tuum (formerly ModularBank). LHV UK currently provides the banking infrastructure and payment services to more than 200 fintechs, including Airwallex, Coinbase and Wise.

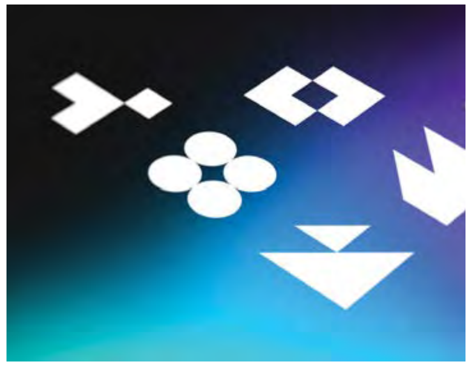
New digital bank Wio set to launch in UAE

Abu Dhabi investment firm ADQ is set to launch a new digital bank, Wio, following an in-principle approval from the Central Bank of UAE.

Wio is also supported by investment holding company Alpha Dhabi, which together with ADQ owns a combined stake of 65%. Telecoms and tech conglomerate Etisalat holds a 25% stake and First Abu Dhabi Bank (FAB) holds 10%.

Set to go live in H1 2022, Wio will initially cater to the country's SMEs.

Thought Machine gains new clients in Hungary and Vietnam



UK-based banking tech vendor Thought Machine has signed Magyar Bankholding in Hungary and HD Bank in Vietnam for its Vault core banking system.

Magyar Bankholding, Hungary's second largest bank, will use Vault to launch a new digital bank, which will offer lending, savings and payments products to retail clients.

The bank was created in late 2020 via a three-way merger of savings group Takarekbank (MTB), Budapest Bank and MKB Bank. The latter two are long-standing users of the Flexcube core banking system from Oracle FS.

Magyar Bankholding has set up a new division called Foundation, tasked with building a new digital bank.

Vietnam's HD Bank has embarked on a multi-year transformation, which will initially consist of upgrading its core platforms and internal workflows.

HD Bank says it wants to "reinvent the financial services ecosystem" and drive up financial inclusion in Vietnam. Thought Machine says the bank has chosen to work with the vendor thanks to its "unique flexibility and control".

Core banking tech vendor Technisys acquired by SoFi

SoFi Technologies, an acquisitive US-based fintech, has entered into a definitive agreement to purchase core banking software provider Technisys. Technisys' shareholders will receive about 84 million shares of SoFi common stock, with an aggregate value of about $1.1 billion.

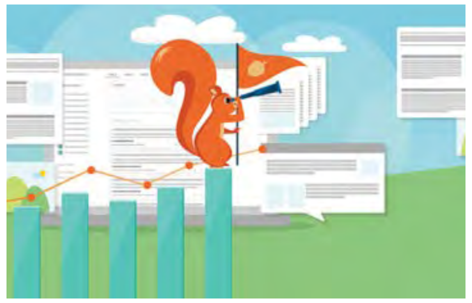
Technisys has been around since 1995, based in Miami. It provides cloud-based core banking and digital channels software, Cyberbank. Its clients are primarily in Latin America, but it has also been making inroads into the US and Canada. Among Cyberbank takers are Canada-based Brightside (ATB Financial's digital banking offshoot) and US-based neobanking service Rellevate.

Technisys is expected to deliver approximately $70 million in revenue for calendar year 2021. SoFi says its ambition is "to build the AWS of fintech". Earlier this year, it received regulatory approval in the US to become a national bank, following its purchase of California-based Golden Pacific Bank.

The combination of Technisys' platform with SoFi's earlier acquisition, Galileo, will support multiple products, including checking, savings, deposits, lending and credit cards. "The combined technology stack will create what is expected to be the only end-to-end vertically integrated banking technology stack," SoFi says.

It targets established banks, fintechs and non-financial brands looking to enter financial services in North and South Americas.

Squirro signs ECB, makes acquisition and raises funds



Squirro, a Switzerland-based provider of augmented intelligence solutions, has implemented its Insight Engine and Risk Insights software at the European Central Bank (ECB).

Squirro already works with central banks such as the UK's Bank of England and Germany's Deutsche Bundesbank (as well as commercial banks such as Standard Chartered and ING).

It has also acquired a US start-up, open.exchange. Austin, Texas-based open.exchange describes itself as an artificial intelligence (AI) driven platform "promising to change the way entrepreneurs connect with investors to help them fund and build their companies".

Open.exchange was acquired from BuildGroup, a capital investment firm founded by former Rackspace CEO Lanham Napier.

As part of the deal, BuildGroup made a $4 million equity investment in Squirro, adding to $11.5 million previously raised by the ten-year old firm in a series of funding rounds.

FINTECH FEED

THE NUMBER GAMES

To read more about any of these stories, visit *www.fintechfutures.com/type/news*

80%

is the reduction on the CO_2 emissions created from transactions via a new digital wallet launched by UK-based sustainable paytech Helpful, built in partnership with Railsbank and Plaid

$13.4bn

paid by Canada's TD Bank for Tennessee-based First Horizon Bank in US expansion push; combined with TD Bank's existing US operations, the merged entity will become a top six US bank

$325m

is the price tag of California-based TORA, a cloud-based trading technology solutions provider, acquired by the London Stock Exchange Group (LSEG)

$100m

raised by Indian challenger bank Niyo in a Series C funding round; the bank already claims about four million customers across its banking and wealth management businesses

150

people to be hired by cross-border payments provider Wise (formerly TransferWise) in Singapore over the next year, follows the opening of a new, larger APAC regional hub in the country

€300m

is the third fund of CommerzVentures, the VC arm of Commerzbank, bringing total funds managed to €550 million for the fintech investor

32

branches to be closed by UK banking heavyweight NatWest throughout England and Wales

7th

largest bank by assets in Canada to be created via the merger of Equitable Bank and Concentra Bank, (including its Concentra Trust and Wyth Financial brands)

$100m

invested by Thailand's Siam Commercial Bank (SCB) in Indonesian digital finance platform Akulaku

THEY SAID IT...

"Volopay is an ambitious project. To build an alternative to Volopay, you'd have to launch five different start-ups.

"We are building the control centre for modern companies for all their financial management needs. Our platform is as easy and seamless to use for a five-person company, as it is for a 500-person company."

Rajith Shaji, co-founder of Volopay, commenting on the company's latest Series A funding round, in which it raised $29 million in a mix of equity and debt.

TRENDING

FinZi aiming to educate Colombia's youth

Colombian fintech FinZi is set to launch with a mission to teach financial literacy to the country's youth, and has opened for pre-registration. The start-up's main target audience will be children and teenagers between the ages of ten and 17. It aims to provide them with a current account, contactless Visa debit card and an app that encourages sensible spending and saving. It will partner with a local bank for the banking services.

FinZi also intends to provide the parents of this younger generation with financial literacy tools such as task rewards and spending and expense monitoring to help them teach their kids how to handle their money.

FinZi CEO and co-founder Juan Zavala says the company has already secured a pre-seed capital raise worth $350,000 from private equity funds such as Innopact and First Check Ventures, and investors such as tech entrepreneur Allen Gannet.

It has plans to expand into other Latin American countries.

What a WALO to go

Montreal-based WALO, a start-up that focuses on banking services and financial literacy for kids, has raised $1.1 million from the government of Quebec, Desjardins, Granicus Group and WatchMojo, plus several angel investors.

WALO says it will use the money to get its bank account and prepaid Mastercard card offering to the market, "helping parents teach their kids about managing their first bank account". The launch is expected later this year and the waitlist is currently open.

The project was conceived during the Cooperathon, Desjardins' innovation competition, in late 2018. WALO then moved into the bank's accelerator for young businesses, Start-up in Residence.

Desjardins is the largest cooperative financial group in North America and the fifth largest in the world, with assets of $397 billion.

"We've worked together right from the beginning because the missions and the values of our organisations match up well," comments Martin Brunelle, VP, growth, acquisitions and development office, Desjardins.

"Managing personal finances is a real source of stress in our society. We need to give parents and families the tools they need to improve their financial literacy. We definitely see WALO as part of that solution."

Making banking interconnected

A new digital "bank for youth" called LINC has launched in Jordan, which claims to take a holistic approach to supporting the country's university students and young adults.

LINC offers a full suite of financial services including debit, credit and prepaid cards, current and savings accounts, international money transfers, SMS banking and a portfolio of loan products.

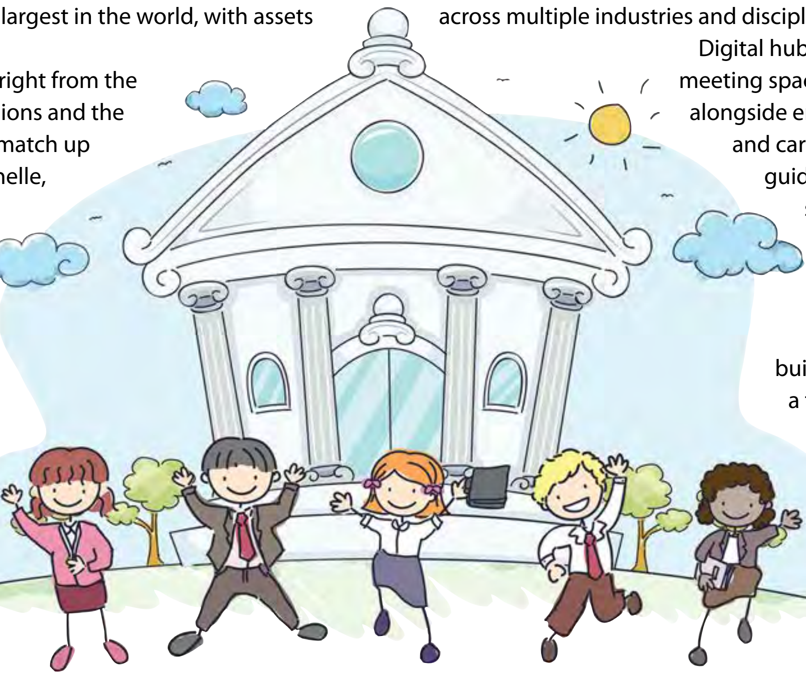
Customers can download the LINC app to utilise the bank's services. PayPal has also partnered with the bank for instant peer-to-peer (P2P) and bank account transfers.

Jordan's first youth-focused bank also offers a selection of specialised learning courses, covering subjects from languages and communication skills to finance and management.

LINC also curates a programme of events, speakers and other resources including lectures, seminars, talks and interviews across multiple industries and disciplines.

Digital hubs, internet access and meeting spaces are also on offer, alongside entrepreneurial support and career and employment guidance. These physical spaces are located in universities and shopping centres throughout Jordan.

The neobank has been built by Cairo Amman Bank, a full-service bank in Jordan and Palestine. It operates around 84 branches and offices in Jordan and 21 in the Palestinian territories.



Injecting a little love into AI

By Dave Wallace

Financial services companies increasingly rely on AI to make decisions that humans used to make, creating efficiencies for the companies and lowering costs.

Where these decisions are customer-related, these customers are now at the mercy of algorithms. In theory, this should be a good thing.

Algorithms don't feel emotions and therefore make decisions based on hard facts and data points, which means that human traits of conscious and unconscious bias should not feature. And yet, it appears that AIs have become an extension of the humans that have programmed them and carried their biases through.

I recently read a fascinating article in Time about Uber's problems with AI.

Uber uses AI-driven facial recognition to verify drivers. However, some drivers say they found themselves locked out of the Uber app because the AI deemed them to be fraudulently trying to access it.

According to the drivers and trade union the Independent Workers' Union of Great Britain (IWGB), the problem seemed to be that the facial recognition technology had trouble with darker skin tones.

In a recent conversation with Kareem Saleh from a start-up called Fairplay, I was confronted by the harsh realities of AI-driven bias in the financial services sector.

Kareem showed me a series of infographics illustrating lending decisions made for home loans in the US. The data source is the lenders themselves, legislated to collect and report ethnicity and gender as part of the process.

Fairplay has collated all the available data and uses it to power a dashboard that shows down to county level lending decisions. The data shows a shocking bias based on ethnicity and gender.

The negative bias is particularly acute for Black people, although Hispanic and Native Americans do not fare much better. Women are also more likely to be disadvantaged than men.

Seeing the comparisons is sobering.

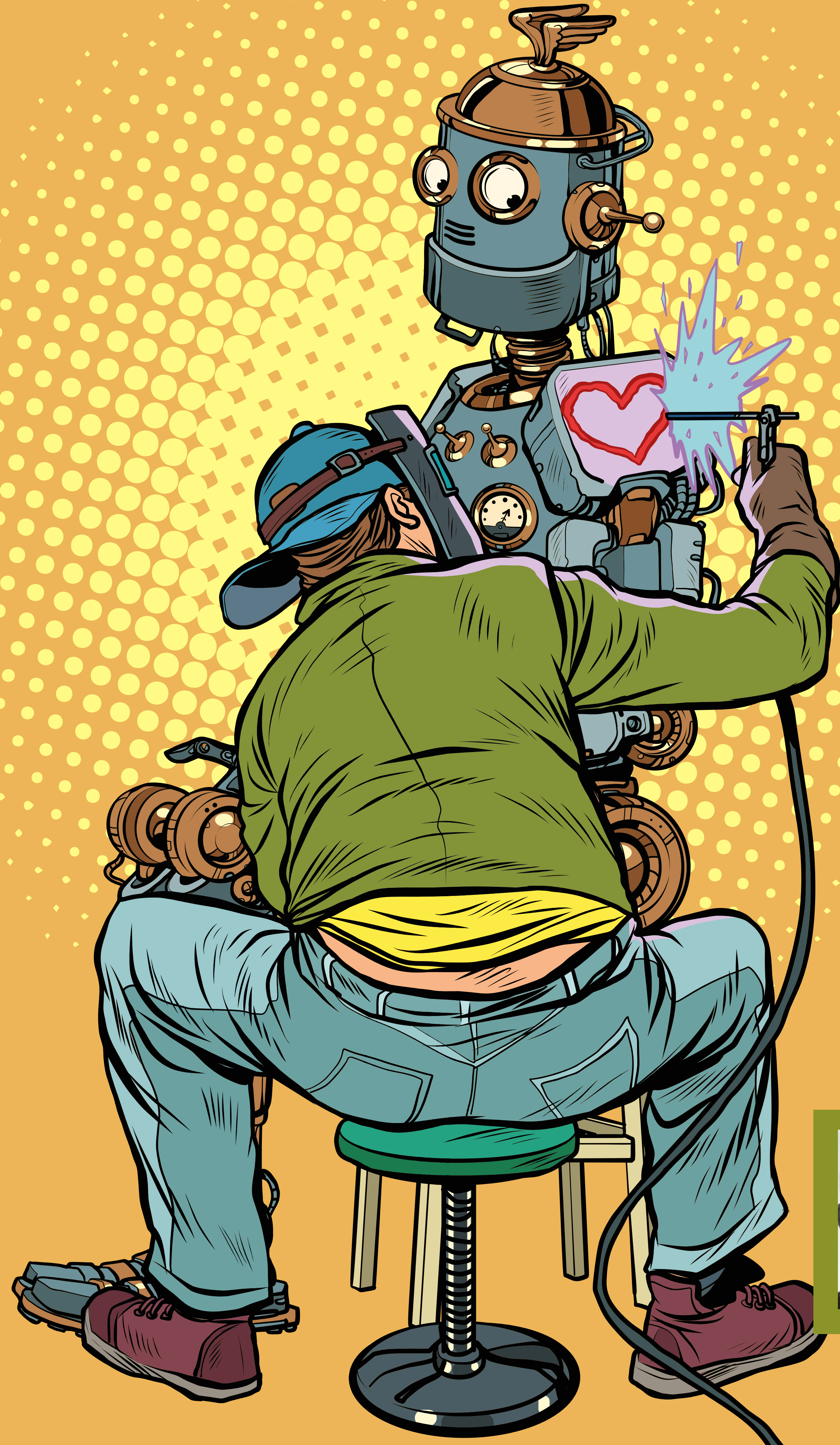
Results can be shown by institution and for most, I would say that it makes incredibly uncomfortable viewing. Black people in many areas are 80% less likely to get a positive outcome.

When Kareem first showed me the infographics, I had assumed (perhaps naively) that the results were based on a human-driven process. So, it was all the more shocking to discover that the results were driven by machines.

I asked Kareem what the best approach was to solve the problem. He responded that "the first thing to do is a diagnosis". Kareem told me that Fairplay has an analysis tool that analyses a bank's existing lending software for signs of discrimination. It tries to answer the following questions:

- Is the algorithm fair?
- If not, why not?
- How could it be fairer?
- What's the economic impact to the business of being fair?
- Do applicants who are rejected get a second look to see if they might resemble favoured borrowers?

> "As machines make more decisions, consumers will want to know that those decisions are made fairly."
>
> Dave Wallace



Answering these questions forces institutions to look at their decision engines and find ways to re-train them.

Re-evaluating declined loan applications happens using more complete information about the borrowers and different modelling techniques to see if they resemble creditworthy people. So, for example, women tend to have inconsistent employment between 25 and 45. This would be a creditworthiness flag for male borrowers but not necessarily for women taking career breaks to raise children.

Kareem knows that lenders will increase their approval rates for female, Black and other non-White people by re-training algorithms and taking a second look at rejected customers, particularly those just below the approval threshold. By his estimates, this increase can be 10-30%, which is huge.

The danger for all of us is that AI becomes a blunt instrument, making decisions based on the data that it is being given rather than looking more broadly.

As machines make more decisions, consumers will want to know that those decisions are made fairly. It is not just consumers either. Regulators are prioritising diversity and inclusion. They can see removing bias and increasing fairness will benefit the sector.

Frankly, we who work in the industry should be doing all we can to ensure that race and gender have little influence on machines' decisions.

Unpicking bias in AI is a whole new fintech opportunity and one that appears to be very needed.

So, if I were an institution, I would be looking carefully at my algorithms and AI, asking Kareem's five incredibly sensible questions, and then doing something about it!

Dave Wallace is a user experience and marketing professional who has spent the last 25 years helping financial services companies design, launch and evolve digital customer experiences.

He is a passionate customer advocate and champion and a successful entrepreneur.

Follow him on Twitter @davejvwallace.

Neobanks: boxing clever?

By Puneet Chhahira, head of marketing and platform strategy, Infosys Finacle

As of February 2022, there are more than 250 neobanks in the world. Almost every one of them is working in a niche, targeting a product (lending, payments, wealth), a customer segment (retail, business) or a community (youth, gig workers, migrants).

Another thing they have in common is a stated intent to disrupt the incumbent banks and take business away from them. Our view is that it is too early to accept or dispute this claim. What's more, this statement does not reflect the whole truth of the relationship between neo and established banks, which is one part cooperation and one part competition.

Currently, not even the most successful neobanks have taken notable market share away from incumbents. But collectively, they can create serious concerns by chipping away at the most profitable parts of the leaders' business.

Typically, neobanks are fighting their bigger rivals in three ways – in acquiring customers, in engaging with those customers and in making money off them.

This piece focuses on these evolving competitive aspects of neobanking.

NEOBANKS ARE GATHERING CUSTOMERS, BUT ALSO NEED TO ENGAGE THEM

Neobanks have chosen the customer experience route to acquire customers, because that is their biggest strength versus the incumbents. Common tactics include attractive pricing by way of low-interest rates on loans or lower fees on banking transactions and attractive rewards.

This approach has served neobanks well in every country, helping them onboard a huge number of customers very quickly. However, other digital participants, such as challenger banks, big tech players and even the digital-only propositions of incumbent banks (think Marcus by Goldman Sachs or digibank by DBS) have seen similar success.

With the playbook being similar, how will so many neobanks popping up in different geographies differentiate and succeed? In our experience of supporting financial institutions in over 100 countries, any new entrant needs to find a different business model or at least a focused viable market or affinity group, and serve it well. Examples include GoHenry (addressing teenagers), Aspiration (fighting climate change) and Majority (migrant communities).

Neobanks focusing on adjacent opportunities, such as Square Financial Services – which is targeting its merchant base – or RazorpayX – which is extending cash management services to its business customers – are even better placed.

However, neobanks need to do more than simply acquire customers to sustain their business; they also need to engage with them meaningfully. But then the engagement dynamics are evolving even faster.

THE ENGAGEMENT EDGE IS BLUNTING AS TRANSACTIONS FLEE TO CONSUMER APPS

Just like they all follow a similar strategy for acquiring customers, neobanks typically use a similar playbook when it comes to engagement. For instance, most of them use insights to help customers understand their financial status (for example, overspent on eating out), predict events (such as a cash crunch or one-time outgo), and recommend actions based on individual context (cut back discretionary spending or move money to better yielding investments).

Rewards and gamification are some of the ways by which neobanks are attracting the attention of customers. Providers are also riding on commerce opportunities, to be a part of the primary consumption process – buying a car or planning a vacation – because that is where customers spend most of their time.

Many firms are launching new products that by definition increase the frequency of engagement – for example, nano deposits and the buy now, pay later (BNPL) option, which is effectively a small ticket loan for financing commerce purchases.

But with open banking and embedded finance, banking transactions are leaving banking apps altogether. Consider India's UPI transactions, which in January 2022 alone numbered 4.6 billion, with Walmart's PhonePe and Google Pay originating over 80% percent of the transactions. This is even though there are over 65 other apps from incumbents and neobanks to do the same.

That's not all. Google Pay already offers loans and term deposits and will offer many other banking products in the future. Thus the key question is, how will neobanks engage their customers when they don't need to use banking apps, and will instead use consumer-facing apps for banking?

Open, which is among the first neobanks in Asia focused on small and medium size businesses (SMBs), is one of the few trying to find a solution. Its second brand, Zwitch, offers banking services to other aspirants via APIs, effectively changing the original business-to-consumer (B2C) model to business-to-business-to-consumer (B2B2C). Such approaches will put a neobank in direct competition with other specialist Banking-as-a-Service (BaaS) providers, such as Galileo, Marqeta and Stripe.

This example shows that while neobanks may focus their early efforts on competing with incumbent banks, they will soon be surrounded by competition from big tech and consumer-facing brands consuming BaaS services to serve customers.

NEOBANKS MUST COMPETE ON MONETISATION, BUT HOW?

At that time, how can neobanks not only hold on to their customers but also earn some income from engaging them? Neobanks are still evolving their monetisation models; in many markets these are built on merchant discount rate (MDR) earnings from debit card transactions. However, that model is at risk from regulations that are driving down MDR.

Hence there is a need to work on alternative sources of income, such as lending, investment and referral.

Each area has its opportunities and challenges: neobanks have the technology and analytical expertise to personalise loans, but are they attracting creditworthy customers? The other question is how long they can continue to lend at competitive rates if they do not have their own low-cost deposits.

Peer-to-peer (P2P) lender LendingClub saw its net income go up from 0.2 million to 29 million for the same size of originations when it acquired a bank and, therefore, its deposit-taking capabilities. Low-cost lending needs low-cost funding.

The investment business can yield good returns, but requires dedicated efforts to break into. Also, the competition is fierce both from traditional companies and new-age digital advisors. The third option – referral fee – is a small opportunity to start with, so cannot be the mainstay of a neobank's existence.

Also, whatever be the monetisation model, it should be part of the plan right from the start. Once something is offered free, it is almost impossible to get customers to pay for it later.

Neobanks are entering the banking industry at a crucial juncture. As the industry unbundles and bundles repeatedly, it is presenting neobanks, tech giants and other non-bank players with several opportunities.

The way to respond is by using first principles thinking and building a differentiated business model around getting customers' jobs to be done – to create and deliver unique customer value through better offerings, engaging experiences and purposeful partnerships. The standard playbook is unlikely to deliver winners in such a competitive market.

"Neobanks are fighting their bigger rivals in three ways – in acquiring customers, in engaging with those customers and in making money off them."

Puneet Chhahira, Infosys Finacle

Having a hand in climate change

What does a zero carbon, climate-focused community bank look like? Martin Whybrow spoke to Climate First Bank's founder, Ken LaRoe, and CTO, Marcio deOliveira, about the US entrant's ethos, technology and plans, including its mixed views on fintechs

Climate First Bank is an interesting entrant on the US market. Based in Florida and opening for business on 1 June 2021, it claims to be the country's first climate-focused community bank.

It started with personal and business loans, deposit accounts and cash management via mobile, online and an initial branch in St Petersburg, with a second branch now opened in Orlando.

The bank wanted a proven, robust core system and, with that in place, it is now looking at how to innovate using open APIs, either building out its own capabilities or partnering with fintechs.

That core system is the widely used Phoenix, which now resides with Finastra. Climate First Bank has it running on Microsoft Azure. Phoenix was developed in the first half of the 1990s and was adopted in that decade by the first bank set up by Climate First founder, chairman and CEO, Ken LaRoe. Climate First is his third bank, following on from Florida Choice Bank and First Green Bank, both of which he sold.

As well as the functional requirements, Finastra had to satisfy the new bank's environmental remit. LaRoe met with Finastra CEO, Simon Paris, and was reassured that the supplier had the right ethos. There were similar conversations with Microsoft, ahead of the selection of Azure.

Phoenix constituted a mature, stable platform, says the bank's CTO and chief digital officer, Marcio deOliveira: "2021 was about building the foundations."

What the bank is now seeking is an API layer that will unlock the sought after innovation. Its vision is for the core system to be purely a system of record, a database for debits and credits, with a more modern, open digital layer in front.

To this end, it is adopting Finastra's FusionFabric.cloud open development

"We are all in. There is no compromise on ESGs; from day one they were in our business plan."

Ken LaRoe, Climate First Bank

platform. "It is new for us; we are just getting started," says deOliveira.

LaRoe expected fintechs to play a role in the bank's innovation but, while not ruled out, he is cautious. When he has looked, "we're ahead of them, time and time again".

DeOliveira adds that, where it comes to pure technology, fintechs might have a certain advantage. However, banks have the huge benefit of being FDIC-regulated depository authorities and so it might well be that Climate First Bank has more to offer fintechs than the other way round, providing a Banking-as-a-Service (BaaS) platform. He describes it as "a key component in our strategy".

"For a community bank, why outsource to a tech company… it is a hard analysis," says deOliveira. For one thing, "there is a mission element to everything we do", so those fintechs would need to also be aligned to this.

"I am really irritated by some of the fintech greenwash going on," says LaRoe. He is particularly scathing about some of the solar financing fintechs – "predatory, scummy, not transparent". Climate First's objective is to provide solutions that are good for the consumer and put solar panels on US roofs. If the bank makes money from this, then that's good, but it's not the priority, he says.

Climate First Bank offers solar energy loan programmes with a focus on residential and commercial uses. There is enthusiasm from other banks to white label these, says LaRoe: "They are very keen on our solar programme because none of them are doing it."

Climate First Bank has one BaaS partnership to date, with savings fintech Atmos Financial. Atmos, which launched in January 2021, has a focus on shifting capital from fossil fuels to clean energy.

The bank certainly "walks the walk". Via global non-profit network 1% for the Planet, Climate First Bank pledges to donate 1% of annual revenue to support sustainability-oriented non-profit organisations that are tackling the planet's most pressing environmental issues.

The bank has B Corp status (this means its performance is verified against the B Impact Assessment, which measures how a company's operations and business model impact governance, workers, community, environment and customers).

It plans to become a member of the Global Alliance for Banking on Values (GABV) – LaRoe's First Green Bank was an early member but banks have to be operating for at least one year before being eligible for membership.

It is also a member of the Net-Zero Banking Alliance (NZBA), the industry-led, UN-convened alliance of banks worldwide, committed to aligning their lending and investment portfolios with net-zero emissions by 2050 or sooner, in line with the most ambitious targets set by the Paris Climate Agreement.

It seeks to align with four of the UN's Sustainable Development Goals (SDGs): affordable and clean energy; sustainable cities and communities; climate action; and partnerships for the goals. And its manifesto draws heavily on Project Drawdown, which outlines a measurable, executable plan to halt climate change by drawing down atmospheric levels of CO_2 as quickly, safely and equitably as possible.

PROJECT REGENERATION

Inspired by Drawdown, it has recently launched a regeneration checking account, in collaboration with one of the instigators of Drawdown, Paul Hawken. For every new qualifying account, the bank makes a $100 donation to Project Regeneration, Hawken's non-profit organisation advocating for a plan to end the climate crisis in one generation. In addition, all interest earned on the account is donated to Project Regeneration. Customers receive a free autographed copy of Hawken's book, Regeneration.

Climate First Bank's St Petersburg branch

In terms of being zero carbon, "this is the most difficult thing to figure out", says LaRoe. It has environmental, social and governance (ESG) specialists within its team and is also advised by Gainesville, Florida-based non-profit We Are Neutral, which helps businesses and individuals understand, reduce and offset their carbon footprints. "We are all in. There is no compromise on ESGs; from day one they were in our business plan," says LaRoe.

To assess and disclose the greenhouse gas emissions associated with its loans and investments, the bank is using the approach devised by the Partnership for Carbon Accounting Financials (PCAF). PCAF is a global partnership of financial institutions that works to develop and implement a harmonised accounting approach to setting science-based targets and aligning their portfolio with the Paris Agreement.

It is very hard to quantify the impact on internal and external IT. For Azure, Microsoft provides a dashboard to quantify a user's carbon footprint. Offsetting has to currently be part of being carbon neutral but the bank only does this where it has taken every possible direct step to be zero carbon. "It is very important to not see offsetting as a way out; we are very conscious of that," says deOliveira.

Ultimately, says LaRoe, the bank would like to embrace zero carbon not only for scope one emissions but also scope two and three, but clearly that is highly challenging across thousands of personal and corporate customers.

For now, it can seek to inform and nudge customers. This can include providing data to help people understand the impact of their actions and behaviour on the environment. Once understood, the bank can provide options and incentives for them to make adjustments to their everyday activities. And it can provide transparency around how customers' deposits are being used. One benefit, says deOliveira, is that the bank has an interested, engaged customer base. "They are open and willing to work with us every day," he says.

"It is very important to not see offsetting as a way out; we are very conscious of that."

Marcio deOliveira, Climate First Bank

It is also seeking to address the carbon footprint of its staff as well as aiming to ensure all of its own buildings are net zero.

CRISIS CLOSE TO HOME

The climate crisis is only too apparent in Climate First Bank's home state of Florida, with the threat of ever increasing storms and super-charged hurricanes, sea level rises and record-breaking heat days, among other climate impacts. The bank claims to have been carbon neutral since day one, commits to never investing in extractive industries, and makes every decision through the lens of achieving Drawdown.

LaRoe hopes that other banks will shift in this direction but, for the time being, his bank is one of a very small minority around the globe that has such a remit at its heart. That alone is proving an attraction for customers; the innovation that is planned via its technology is intended to provide further reach and impact.

PROFILE

Banking's digital transformation journey

By Dharmesh Mistry, CEO, Askhomey

With all the funding that's piling into fintech, it's easy to think that banks aren't innovating or that they are bad at digital transformation.

Even inside a bank it may feel like the world outside is moving at pace and your own bank is too slow.

However, it's easy to forget that the vast majority of fintechs are unprofitable, few have grown to have double-digit millions of customers, and none have the resources of Tier 1 banks.

Too much emphasis is given to innovation alone, even though having a great idea does not necessarily lead to a profitable business. Is it better to roll the dice on innovation while existing products and services are generating profitable income?

In the defence of banks, they have already gone through some huge transformations in relatively short windows of time. In the late 60s, ATMs allowed customers to withdraw cash without human intervention.

In the 70s, mainframe computers were introduced to remove the paper ledgers in branches – leading to the creation of core banking systems. Branches were given terminals for performing bank transfers.

In the late 80s, PCs were introduced into branches to automate many paper-based functions. Prior to computers, banks had fleets of secure vans moving money and paper.

This was a change I experienced first-hand when I started my career at Lloyds Bank. We not only put a local area network into every branch, but had over 40,000 PCs deployed across 2,000 branches. Now imagine having to upgrade the software on these! We wrote our own solutions for distributing software and managing this huge estate. With 2MB of memory and Intel 386 processors, we were running six to eight Windows applications. By the mid 90s, the bank introduced the first customer file on IBM's DB2 database.

By this time we were already analysing customer data to understand who the bank's most profitable customers were and created a programme to redeploy branch managers to take personal responsibility for the top 5% of customers that were earning 80% of the bank's profits. Each manager was armed with some of the first laptop computers and dial-up modems to download data on a monthly basis. We developed CRM solutions to help managers monitor and manage these customers.

By the late 90s, banks had already started developing internet banking solutions. Having left Lloyds Bank, I was involved in implementing some of the very first internet banking solutions for more than 20 banks across Europe.

For the Co-operative Bank, we delivered not only internet banking, but also banking on a Windows CE device. This was essentially an early smartphone without the phone. We also delivered the same solution in kiosks and all three shared around 75% of the same code base as they were written in Java 1.0.

Before the dot-com bubble burst, many of the UK's Tier 1 banks had each spent more than £1 billion creating internet-only banks. NatWest had spent a similar amount on Mondex, a digital cash project. In 1999, I helped deliver the first mobile banking application in the UK for Woolwich. The project was canned less than 18 months later.

> "We tell our children not to grow up too quickly, to enjoy the moments of their childhood. Yet we live in a world that seems to want to grow up too fast."
>
> **Dharmesh Mistry**

So, banks have been going through massive transformations at scale for decades now. When you have a large base of customers, staff and branches, you can't introduce change too quickly else you risk burning customers with ill-thought-through solutions.

Compare this with our two most successful start-up banks: Monzo, founded in 2015, and Starling, founded in 2014. Neither has the product range or customer base to compare with any of the Tier 1 banks. And I doubt they will be moving any faster than the incumbent banks when and if they do reach their size. Indeed, their pace of innovation and speed at which they have introduced new products has already slowed, especially as regulators take a closer look at their compliance.

We tell our children not to grow up too quickly, to enjoy the moments of their childhood. Yet we live in a world that seems to want to grow up too fast. I think it's long overdue that we recognise what banks like Lloyds, Barclays and NatWest have done and are still doing in the transformation of banking.

I'm not saying they couldn't do things better; we all can. I'm just saying that the transformations banks have already gone through in the last 50 years are huge and commendable. It will certainly be interesting to see how they respond over the next few decades.

Dharmesh Mistry has been in banking for 30 years and has been at the forefront of banking technology and innovation. From the very first internet and mobile banking apps to artificial intelligence (AI) and virtual reality (VR). He has been on both sides of the fence and he's not afraid to share his opinions.

He is CEO of AskHomey, which focuses on the experience for households, and an investor and mentor in proptech and fintech.

Charitable giving made simple

By Zephin Livingston, editorial contributor, FinTech Futures

One of the great irritators of the business world is taxes. Whether it's on income, on property or on goods and services, almost everyone is trying to find a way to pay less on these burdensome fees.

An effective and morally gratifying way to reduce taxes in the US is charitable donations. It's a win-win: you get to save money while contributing to a cause you care about, and the organisation gets some much-needed cash flow.

Most of the time, these contributions come in the form of cash donations. However, as Elon Musk's recent $5.7 billion donation has reminded us, there is another option: stocks.

Unfortunately, the process for donating stock can be a complicated, unwieldy one, as DonateStock co-founder and chairman Steve Latham learned first-hand several years ago. What Latham believed would be a quick donation to his alma mater's scholarship fund turned out to be a convoluted mess of red tape that took several days to fully unravel.

This is the story Latham commonly cites when talking about DonateStock's founding. So how does the company help solve that issue, if it's even possible?

From its founding, DonateStock was well aware of the issues with donating stock on the donor side. To handle the problems Latham encountered in his fraught scholarship donations, they collect all required information from the donor and nonprofit and submit it all to the donor's brokerage, beginning the donation process.

As they began, however, they found even more issues, not just on the donors' side but the recipients' as well. In order to receive stock, nonprofits need brokerage accounts set up. Unfortunately, many nonprofits do not have them.

Latham says: "What we found… was that 95% of the nonprofits we talked to didn't have brokerage accounts. And so we would advise them 'go open one on E-Trade or wherever', and they were not able to."

For nonprofits without brokerage accounts, a sort of middleman organisation was needed to convert the donated stock to cash, which would then go to the intended recipients. To become this middleman, DonateStock started its own nonprofit, DonateStock Charitable, with its own brokerage account in order to sell the stock for cash. This cash is then donated to the nonprofit. This created another set of issues for the firm, however.

Latham says: "We thought 'Okay, this is easy'. We get a brokerage that has a checking account and has bill pay. And then we get the proceeds, we upload a bill pay file that allows us to tell it who to send [money to] and how much to [send], and real quickly we discovered that the brokerages' checking accounts didn't have that capability to do disbursements, or if we were going to be uploading bulk groups of payees, we'd have to do it only for ACH payments. They couldn't do it for bill pay."

DonateStock found payouts platform Trolley that could perform this sort of bill pay work. Unfortunately, even with the right partner, the process was not easy. "We had to work for three months," says Latham.

"You talk about those AML (anti-money laundering), those KYC (know your customer) issues. We had to go through tremendous amounts of compliance and auditing, just to get [Trolley] to say 'Yeah'. Because normally, their policy is 'We don't work for nonprofits' because of, historically, the higher chance of fraud."

TENSE RELATIONS

Another issue DonateStock ran into was the anonymity of these stock donations.

Latham says: "If we transfer 100 shares of Apple to you, all that you would see is that 100 shares of Apple came in from a Schwab account. You wouldn't even get a partial account number; you'd get nothing about the donor, no information. And this creates a big problem for the nonprofits because… the donor assumes that if [they're] actually sending this information to my broker… that [their] personal information will travel with it."

This can cause tension between donor and nonprofit, as the donor typically expects a thank you for the donation, and the nonprofit can't send that thank you until the donor makes contact and reveals themselves to the nonprofit. To combat this, DonateStock sends the donor a notification that the stock was successfully received, along with a receipt for the gift.

"We had to go through tremendous amounts of compliance and auditing, just to get [Trolley] to say 'Yeah'."

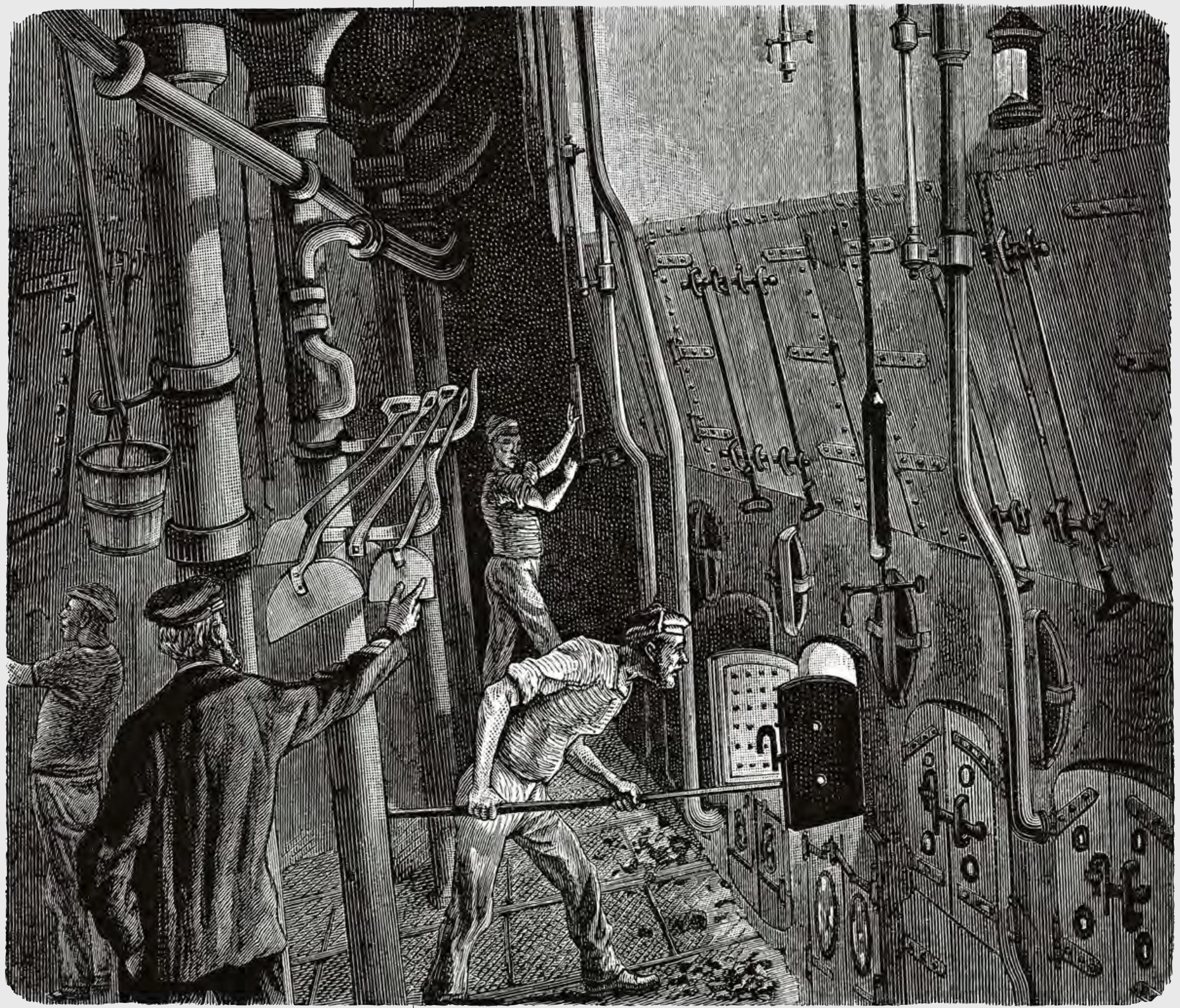
Steve Latham, DonateStock

According to their website, donors can access DonateStock at no cost. For nonprofits, setting up a profile on the site is free. However, the company charges a 2% processing fee, which it contends in its FAQs is half what nonprofits pay for cash donations. No source is given for this claim, however, and it is entirely dependent on how a cash donation is made. If a donation is made via credit or debit card through a payment processing platform like PayPal, the fees will vary. For example, PayPal extracts a 2.89% fee plus an additional $0.49 fee at the time of writing.

DonateStock's website claims you can donate stock "to ANY nonprofit in good standing with the IRS". This is why two organisations with opposing causes like LIFE Runners Team, the self-proclaimed "world's largest pro-life team", and the New Mexico Religious Coalition for Reproductive Choice are listed as featured nonprofits on DonateStock's "Find a Nonprofit" page. Where the money goes is up to the donor. DonateStock just wants to make sure it gets there.

We need to talk about Bob

By Leda Glyptis



We need to talk about Bob.

Bob is not real.

But he could be.

Let's say Bob just started a job in a bank.

Back office. Not the sexy stuff, not the lucrative stuff. Let's say he is a post-reconciliation breaks and queries clerk. That's when something breaks or doesn't look right even after you have reconciled everything. Yes, it's a real job. So, let's say that's what he does.

He reports into Claire who runs the reconciliations teams. Those are the guys who do the actual reconciliations, checking what happened against what should have happened and flagging discrepancies where they occur.

The guys who deal with the queries when what should have happened isn't exactly clear or when you are not sure if something is a typo or what or where you have multiple 'breaks' so it's not clear what is right and what is not. And Bob and his team do the post-reconciliation 'oops we missed this' clean-up.

Claire reports into Nigel, who runs the corporate actions teams. They do all the posting and share certificates and resolutions. It doesn't make sense that the reconciliations team report into him necessarily, but operations was slimmed down as part of cost-cutting a few years back and there was nowhere else to put them and Nigel didn't mind. More people equals more budget, which is no bad thing when climbing the greasy pole.

Nigel also has the teams doing net asset valuations and that's sort of why he has the reconciliations team, though they don't really work together day to day.

Nigel reports to Mark who runs all of fund accounting excluding IT because that's a different reporting line, and although he knows reconciliations happen, he doesn't know what tools they use, whether they have a process to see a break in a trade and go 'this isn't going to break just here, let's fix it across the board' (they don't) or who Bob is.

Fund accounting reports into Susan, the head of securities. She came from the client/sales side, so she has no idea what happens in the corporate actions team other than 'corporate actions' and she knows it's back-office stuff and rather manual and it needs to keep happening. She also knows it is not the 'high-value' work her teams do.

Susan rolls up into Ken, the regional head of asset servicing, who probably goes months without having the reconciliations function mentioned.

Ken reports into the global head and frankly resents it because Helen, the global head, has no P&L of her own and here she is lording it over the people who do as their boss. But the CEO needed to reduce his span of control so he stuck a layer in to reduce his direct reports. So Helen reports into the CEO. Or maybe not.

Maybe she reports into Jeff, the executive vice present for a combination of client types who consume these services, who then reports into Bradley, chief something or other officer in charge of financial markets who then rolls into Gary, the CEO. Neither Jeff nor Bradley, nor indeed Gary, spend time thinking about how the bank does reconciliations because they have bigger, high-value problems to worry about.

Bob knows who Jeff and Gary are but of course he has not, and will not, ever meet them. And he knows the names of the folks a few layers above Claire, his boss, but it gets a bit hazy after that until you get to Jeff and Gary. Who they are, what they do, how it all fits together. But that doesn't matter all that much because what he does day in, day out is both deeply technical and highly repetitive, so it becomes rather self-contained unless a big thing changes. A system change. A big systemic event. Claire being promoted and a new Claire coming in.

And this structure could be further enlarged and complicated by history (acquisitions, mergers, client demands or regulatory change and consulting recommendations), tooling and technology (if Bob is doing reconciliations on an Excel spreadsheet, then there will be dozens of Bobs and there will definitely be some team leads between him and Claire and on and on).

Why am I telling you all this?

First of all, because it's true. And it is most of what banking looks like when it's at home.

But also because for Bob, digital transformation is not a relevant reality and he probably has never heard of fintech.

Let's face it, digital transformation starts where it's visible and focuses where it's high value and, if it ever gets to Bob, it will be to eliminate the need for him and his colleagues.

And that's OK. That's how life goes.

But I have two questions we need to ask ourselves ideally before we get to Bob:

• What happens to Bob next?

Where is our reskilling and upskilling awareness? What will Bob do next to feed his family after we've 'realised' the cost saving in the shape of Bob and his team not being needed anymore?

• Given that we followed Bob all the way out to the top of his food chain – and a long chain that was – and Bob's isn't the only department out there, what does the world look like in real terms?

There are thousands of permutations here and dozens of 'ladders' leading from the CEO to thousands of Bobs. Similar ladders leading into the recesses of operational teams doing narrow but essential, albeit unglamorous, tasks. I am just wondering: are we sure that whoever is driving the digitisation work that will eventually and inevitably eliminate Bob is aware of what Bob is doing all day? Just to ensure nothing is missed across the tens of thousands of Bobs across the hundreds of teams in back offices keeping banking humming along doing stuff like bond coupon issuance that everyone knows is happening but nobody necessarily stops to think that humans actively do it. But they do.

Most of banking happens by human intervention. Not tech. Not magic.

So as digital transformation unfolds, the dirtiest secret we will need to face into is how deep the recesses of untouched territory reach. We speak of legacy tech a lot. But a lot of banking work is low to no tech. Just saying. Make sure you have a plan before you fire Bob.

When you face into that ladder of humans, up and down, and the one next to it and the one next to that, you see the detail, you see the duplication, you see the waste of human effort.

You see layers upon layers of overhead, perhaps, and you almost certainly see inefficiency or lost opportunity or lack of connectivity and alignment.

So.

Before you deploy the new system, slim it down. Streamline it. Fix it.

So that the next time a new Bob walks into the building to start a new job, whatever that is, they don't feel crushed by a behemoth of layers, rising into a lofty pyramid at the bottom of which is Bob and at the top is Gary and neither has any idea how the two fit together.

#LedaWrites

Leda Glyptis is *FinTech Futures'* resident thought provocateur – she leads, writes on, lives and breathes transformation and digital disruption. She is a recovering banker, lapsed academic and long-term resident of the banking ecosystem.

All opinions are her own. You can't have them – but you are welcome to debate and comment! Follow Leda on Twitter (@LedaGlyptis) and LinkedIn (Leda Glyptis PhD). Visit our website for more of her articles.

Round and round: how fintechs are aiming to save the planet

By Alex Pugh, reporter, FinTech Futures

Source, make, transport, buy, discard, bury. Repeat *ad infinitum*.

This linear progression charting the billions of goods we consume every day, week, month or year is unsustainable.

While the UK has seen the amount of waste heading to landfill decline in recent years thanks largely to the increase in recycling efforts, this little island nation still buries millions of tonnes of waste every year.

A number of companies and fintechs have sprung up in recent years looking to combat the use-once-then-discard paradigm.

One such fintech is Twig, an e-money start-up that allows users to upload images of unwanted items to its app and receive a valuation and an immediate offer to sell their items straight away.

Based in London, Twig provides a free account where customers can send and receive payments online as well as a Twig Visa debit card that can be used online or in-store.

Twig says it is built on "circular economy" principles, in which used and unwanted items are reused to their full extent, helping to take the strain off the environment.

In essence, a circular economy is an economic system of closed loops in which raw materials, components and products lose as little value as possible, which aims to gradually decouple growth from the consumption of finite resources.

The fintech says that by extending the lifecycle of clothes for just nine months, people can reduce carbon, water and waste footprints by approximately 20 to 30%.

Twig CEO and founder Geri Cupi thinks the circular economy is now at a tipping point in terms of mainstream acceptance.

TIPPING POINT

"The potential of the circular economy is just beginning to show its capacity," Cupi says. This is partly down to changing consumer behaviours and attitudes.

The consumer landscape has evolved in recent years, with people more aware and savvier when it comes to sustainability and the impact of their actions on the environment.

But greenwashing – the practice in which green marketing is deceptively used to persuade the public that an organisation's products, aims and policies are environmentally friendly – is still a problem.

Thankfully, Cupi says people are much more aware of the repercussions of environmental deterioration and are increasingly seeing through greenwashing initiatives and demanding more from companies.

"They rightfully have an urgency to ask the right questions and demand the right responses from all impacting stakeholders," says Cupi. "I would caution organisations that resort to greenwashing to not embrace short-termism and undermine their audience."

Such strategies are doomed: they fail to both resonate and are ultimately ineffective in terms of environmental conservation.

Winner organisations in the space are the ones that have an open, transparent and measurable approach and are not afraid to challenge their own practices periodically, thoroughly and without bias.

"Bold dialogue is what we need on a collective level," Cupi adds.

WALKING THE WALK

A company's internal processes and codes of conduct will naturally influence its attitudes toward the environment and sustainability.

But external structures, such as partnerships and advocacy groups that have expertise in the field, will be able to monitor and certify these practices.

This scaffolding is what is most likely to telegraph to consumers that a company, whether a fintech or retailer, is walking the walk, not just talking the talk when it comes to green credentials.

An example would be Twig's pending B Corp status. B Corps are companies verified to meet high standards of social and environmental performance, transparency and accountability.

Cupi says the multi-phased process that Twig is having to complete to achieve its B Corp status ensures it is continuously striving for the best sustainability standards.

"Another one would be our partnership with [circular economy advocacy group]

> "With time, knowledge and experience, we believe that every fintech will be primarily focused on their impact."
>
> Geri Cupi, Twig

the Ellen MacArthur Foundation," Cupi says.

Do smaller, leaner outfits have an advantage when it comes to doing good in the sustainability and environmental spheres? Although it depends on several factors, a company's vision and aims outweigh its size when it comes to aligning growth with sustainability.

"While we can understand that complexities around change and management overall are more difficult in established and larger organisations, we simply believe supporting circularity and embracing sustainability is no longer a choice," Cupi says.

To this end, Twig aims to lead by example with efforts such as green payment possibilities, diverting goods from landfill and recycling unused goods.

THE FUTURE IS GREEN

When it comes to sustainability, the UK's fintech scene is certainly looking strong.

The UK is one of the leading forces in terms of spearheading sustainability goals, creating both awareness and public discourse as well as being proactive in policy consideration and moving towards sustainability.

The EU has also stepped up on numerous areas on this front, with France in particular recently banning single-use plastics in supermarkets and also bringing legislation against clothing waste.

And the marriage of sustainability goals with new and emerging technologies such as blockchain and distributed ledger technologies (DLT) could also have a positive impact on sustainability.

Twig has also examined different fintech areas where it can bring innovation through products that hybridise benefits to the consumer, to the fintech itself and the planet.

The company says it has "many products in the pipeline", including an array of new payments products including a Web 3.0 payment infrastructure as well as carbon offsetting and impact products.

Twig claims to be the fastest-growing fintech in Europe, and Cupi says it has surpassed the growth of neobanks including Monzo, Revolut and Monese.

"As we are experiencing hypergrowth that is currently unprecedented, our mindset is expansive and focused on delivering the best service to our customers," he says.

On the back of that, Cupi is optimistic about the future, expecting the green fintech scene in five or ten years' time to be "very different" to what it is now.

"With time, knowledge and experience, we believe that every fintech – even if they are not currently sustainable – will be primarily focused on their impact and have several ways in which they are working towards a healthier environment," he says.

One eye on the future

By Stephen Ritter, CTO, and Sanjay Gupta, VP, Mitek

As we move through 2022 with the pandemic still ongoing, technologies designed to connect us will be more important than ever.

However, as many banks and technology firms enter their third calendar year serving customers remotely, they should not treat customer data with complacency. It's time for businesses to thank customers for their loyalty by making their lives safer and simpler.

Here's how we think this shift will happen with our five ID verification predictions for 2022.

1 AN ARTIFICIAL INTELLIGENCE (AI) BILL OF RIGHTS WILL LIMIT IRRESPONSIBLE DATA USE

In 2022, an AI Bill of Rights will most likely be proposed by the US administration after it establishes its advisory commission on AI technologies.

Legislation that limits the non-consensual scope and impact of AI on consumers is badly needed. Similar to the EU's GDPR, a bill focused on consumer protections won't limit innovation in companies providing AI solutions. That is, so long as they obtain consumers' consent to use their data.

However, it will act as a shield against businesses marketing or using that data without disclosing its purpose. We will need further regulations in the coming years as AI technologies continue to grow and become more sophisticated.

2 CONTACTLESS TECH WILL DO MORE THAN LIMIT FUTURE PANDEMICS

Over the last 12 months, contactless technology usage has hit an all-time high as businesses responded quickly to customer fears over COVID-19 and personal hygiene.

By introducing consumers to these technologies through touchless ATMs or QR code sign-in at hotels, for example, service providers showed the public how much more convenient they are. When customers don't have to pull out their wallets or manually navigate through an interface, service becomes faster and easier. Most people won't want to give that up even once the pandemic is over.

In 2022, we'll see more airlines use touchless technologies, as well as new industries like concerts and sports arenas, public transportation, and retail stores. In addition to decreasing wait times, biometrics-based authentication also prevents ticket fraud, an issue that has been on the rise in recent years as more consumers are buying digital tickets.

3 DECENTRALISED IDENTITY PLATFORMS WILL ENCOURAGE NEW BIG TECH COMPETITION

The race to establish the industry's leading decentralised identity platform will be the catalyst for a new era of competition between the likes of Microsoft and Apple.

Apple's approach to decentralised ID has been limited to customers within its own ecosystem, contributing to what some have called a "walled garden". It also hasn't made decentralisation a major selling point of its offerings.

Meanwhile, Microsoft made waves announcing its own decentralised system in 2021. In principle, this would allow a broader segment of businesses to use the service. 2022 will be the year competition really heats up to determine which approach and ecosystem customers choose for decentralised identity.

4 THE FINANCIAL SECTOR CONTINUES TO FOCUS ON THE DIGITAL CONSUMER

Consumer foot traffic in bank branches fell dramatically during the height of the pandemic. This trend made it easier for rival banking groups with a stronger digital focus to tempt customers away from branches.

As a result, banks poured an influx of funds into their digital strategies to add more value for digitally-minded consumers. Thanks to the success of those efforts last year, they will most likely continue to push for more mobile-first, customer-focused technologies in 2022.

These digital services will focus heavily on minimising friction to make apps faster and easier to access. Combining a focus on digital technologies with consumers' longstanding trust in the banking industry will also provide opportunities for banks to explore newer and sometimes riskier services. These include decentralised finance, where consumer interest is growing.

5 THE FUTURE OF AUTHENTICATION IS BEHAVIOURAL BIOMETRICS

Identity verification to strengthen online transaction security will thrive in 2022, thanks to the increasing popularity of biometrics-based AI technologies. The International Air Transport Association (IATA) recently surveyed airports that implemented biometrics systems in 2021 and found many consumers support common types of identity verification, such as fingerprint matching.

In the next year, we will hear more about behavioural biometrics and voice matching as these new methods enable people to conduct business and transactions online more securely.

FINTECH FUNDING ROUND-UP

UK-based **Shares**, which claims to be "Europe's first social and investing app with a waitlist of more than 60,000", has launched its app to the market and closed a **$40 million** Series A round.

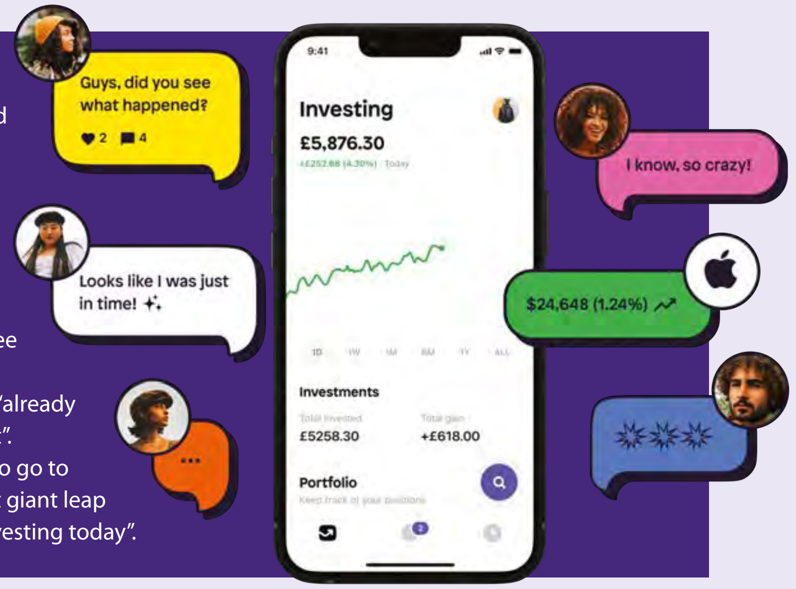
The round was led by Peter Thiel's fund, Valar Ventures.

This brings the start-up's total funding to $50 million. Among its earlier investors are Singular and Global Founders Capital.

In the nine months since its inception, Shares has hired more than 130 full-time employees and established its first three offices in London, Paris and Krakow.

Harjas Singh, co-founder and chief product officer, says it is "already in a position to compete with the biggest players in the market".

Benjamin Chemla, co-founder and CEO, adds the plans are to go to Europe and beyond, and describes the app's launch as "the first giant leap toward giving everyone what's missing in the experience of investing today".



Australian fintech **Zeller** has raised **$73 million** (AUD 100 million) in a Series B funding round.

The round was led by US venture capital firm Headline and saw participation from Australian industry superannuation fund Hostplus and existing investors Square Peg, Addition and Spark Capital, among others.

The company says the new capital injection has doubled its valuation to more than $730 million (AUD 1 billion).

Zeller provides a "financial operating system" for businesses – a fully integrated payments and financial services solution including an EFTPOS terminal, business transaction account and Mastercard debit card.

Zeller says it has signed up more than 10,000 domestic businesses within eight months, with more than 80% of customers switching from traditional banking.

Indian neobank **Niyo** has raised **$100 million** in a Series C funding round.

The round was led by Accel and Lightrock India and saw participation from new investor Beams Fintech Fund and existing investors Prime Venture Partners and JS Capital, among others.

Niyo will use the money to develop new products, bolster its marketing and branding efforts, increase its distribution footprint and embark on a hiring spree.

It has recently launched a fully digital salary account and is currently working towards launching personal loan products, credit cards and an integrated forex platform.

It claims about four million customers across its banking and wealth management products and adds more than 10,000 new users every day to its platform.

PrimaryBid, a UK-based fintech platform that provides retail investors with access to public markets, has closed a **$190 million** Series C investment round led by SoftBank Vision Fund 2, with participation from existing investors.

The company says the money will be used to expand its offering across continental Europe, leveraging its existing partnerships with ABN AMRO and Euronext, as well as launch in new geographies including the US.

The company says its development plans build on its strong growth over the last 18 months. In that period, more than 150 follow-on and IPO transactions have listed on its platform in the UK.

PrimaryBid also expanded its API services into Europe, conducting its inaugural transaction in France, and launching a new retail bond product.

"Our ambition is to democratise public market offerings through a combination of technology, data and advocacy," says Anand Sambasivan, CEO and co-founder of PrimaryBid.

Italy-based **Scalapay**, a start-up that enables customers to buy now, pay later (BNPL) without interest, has raised **$497 million** in Series B investment funding.

The round was led by Tencent and Willoughby Capital, with participation from Tiger Global, Gangwal, Moore Capital, Deimos, and Fasanara Capital.

Scalapay has also launched a checkout experience platform for e-commerce called Magic.

"There is an incredible opportunity for Magic to redefine European e-commerce, which has a lesser reputation compared to its US peers," csays Johnny Mitrevski, co-founder and CTO of Scalapay.

Scalapay was founded by Mitrevski and Simone Mancini in 2019. The founding team also comprises Raffaele Terrone, Daniele Tessari, and Mirco Mattevi.

It has raised over $700 million in funding to date. Since its $155 million Series A round last September, Scalapay says it has grown its payment volume 3x month over month.

It plans to double its number of employees by the end of the year.

Invisible, un-phishable multifactor authentication (MFA) provider **Beyond Identity** has announced a **$100 million** Series C funding round, which raises the company's total funding to date to $205 million and propels its valuation to $1.1 billion.

Evolution Equity Partners led the round, with existing investors New Enterprise Associates (NEA) and Jim Clark participating. Potentum Partners, Expanding Capital and HBAM also joined the round.

The new funding will be used to further expand the firm's R&D and extend its footprint and resources into Asia-Pacific and Latin America.

Beyond Identity was founded in 2020, with its HQ in New York, US. It employs more than 180 people across North America and EMEA, of which more than 100 are developers in the engineering team.

Pine Labs has received a **$150 million** investment from US asset management firm Alpha Wave Global, taking the its valuation to over $5 billion.

The Bangalore-based merchant commerce platform has previously seen investment from the likes of Sequoia Capital, Temasek Holdings, PayPal and Mastercard.

The company closed a $600 million funding round in July last year before receiving a further $100 million in capital from US firm Invesco Developing Markets Fund in September.

UK banking-as-a-service (BaaS) fintech **Weavr** has secured a **$40 million** Series A funding round. The round was led by Tiger Global and saw participation from Mubadala Capital, LocalGlobe's growth stage Latitude fund and previous Weavr backers QED Investors, Anthemis and Seedcamp.

The Series A marks the Weavr's third funding round in 18 months, bringing its total funding to date to $55 million.

The cash will go towards Weavr's international expansion plans, beginning with a US hiring spree and launch, and supporting growth in the UK and Europe.

Unlike API-reliant BaaS solutions, which require time-intensive integrations, Weavr says its solution works straight out of the box. The start-up claims its model eliminates the cost and burden of multiple vendor relationships, simplifies compliance and shortens the runway for integration.

Nigerian paytech **Flutterwave** has raised **$250 million** in a Series D funding round, valuing the company at more than $3 billion.

This latest round sees Flutterwave's valuation more than triple since its last funding round in March last year, making it the highest-valued African start-up, according to the company.

The round was led by B Capital and saw participation from Alta Park Capital, Whale Rock Capital and Lux Capital, among others. Several existing investors also participated, including Glynn Capital, Avenir Growth, Tiger Global, Green Visor Capital and Salesforce Ventures.

The money will help support its expansion plans, including acquisitions, and developing new products. Last year, it launched a new e-commerce platform and a remittance service.

Since its inception in 2016, Flutterwave claims to have processed more than 200 million transactions worth more than $16 billion across 34 countries in Africa.

Capital access platform **CredAvenue** has raised **$137 million** in Series B. The funding round, led by Insight Partners, B Capital Group and Dragoneer Investment Group, pegs the fintech at a $1.3 billion post-money valuation.

It follows a $90 million Series A round in September 2021 led by Sequoia Capital, Lightspeed Ventures, TVS Capital and Lightrock, who all returned for the Series B.

CredAvenue will use the cash to invest in AI, ML and data analytics solutions. Some of the funds will also go towards building out the firm's collection infrastructure.

The Chennai, India-based start-up claims more than 2,300 corporate customers, connecting them to more than 750 lenders.

Nairobi-based **M-Kopa** has raised **$75 million** in a growth equity funding round, taking its total capital raised to $190 million.

The round was led by Generation Investment Management and Broadscale Group, with participation from LocalGlobe's Latitude Fund and HEPCO Capital Management.

Founded in 2011, M-Kopa is an asset financing platform that provides underbanked customers in Africa with essential products including solar lighting, televisions, fridges, smartphones and financial services without the need for collateral or a guarantor.

It says it has unlocked more than $600 million worth of credit for two million customers across Kenya, Uganda, Nigeria and Ghana.

The money will be used to grow the team and expand into additional countries. MoKopa plans to grow to ten million customers over the next five years.

Funding Societies has raised **$144 million** in an oversubscribed Series C+ equity round. The round was led by SoftBank Vision Fund 2. It also attracted new investors such as Vietnamese tech giant VNG Corporation, Rapyd Ventures, Asia-based global investor EDBI, Indies Capital, K3 Ventures and Ascend Vietnam Ventures.

In addition, Funding Societies received $150 million in debt lines from institutional lenders across Europe, the US and Asia, some of which have been drawn down since 2021.

The latest fundraise also provides $16 million to former and existing employees via the company's stock option plan, in the form of share buyback.

Founded in 2015, the start-up offers micro loans from $500 up to $1.5 million, which can be disbursed in as fast as 24 hours, it says. It also offers expense management and B2B payments services.

Funding Societies operates in Singapore, Indonesia (where it's known as Modalku), Malaysia, Thailand and Vietnam. To date, it says it has disbursed over $2.1 billion in business financing to MSMEs through more than five million loan transactions in Southeast Asia.

Atom, the UK's first app-based bank, has raised more than **£75 million** in new equity priced at 70p per share. "It is a fundamental next step on our journey toward IPO," says CEO Mark Mullen.

The raise was led by existing investors BBVA and Toscafund with co-investors Infinity Investment Partners.

The announcement follows a £40 million raise last spring (which saw its valuation halve compared to 2019).

Atom offers lending and savings products. It experienced a 30% growth in both mortgage and business loans last year and delivered its first monthly operating profit in Q2.

Launched in 2016, it is based in Durham and employs 400+ people.

Filipino paytech **PayMongo** has raised **$31 million** in a Series B funding round.

The round saw participation from Global Founders Capital, Soma Capital and ICCP Venture Partners, among others.

The digital payment solutions provider for merchants is also backed by paytech Stripe, which led PayMongo's $12 million Series A round. It has now raised around $46 million in total.

Genesis, an application development platform for financial markets organisations, has announced a new round of **$200 million** in financing, led by Tiger Global Management.

Accel, GV (formerly Google Ventures), Illuminate Financial, Insight Partners, Salesforce Ventures and Tribeca Early Stage Partners also participated.

Genesis says the funding will be used to expand its platform, developer community and "buy-to-build" model.

The company was founded in 2015. It has offices in New York (HQ), Miami, São Paulo, London and Dublin. It says it has seen "significant momentum" over the last year, tripling the size of the business and overall headcount.

Its users and strategic backers include Citi, ING, Alliance Bernstein, B3 and London Clearinghouse.

Genesis claims to be "the first and only low-code/no-code platform built for financial markets".

This is just a snapshot of the fintech funding activity worldwide. For more info on these and many other deals, head over to the *FinTech Futures* website!

MOVERS AND SHAKERS


Damien MacRae

Australian banking group **Westpac** has appointed **Damien MacRae** as CEO of its nascent Banking-as-a-Service (BaaS) business. Built over the last two years, the BaaS offering leverages a cloud-native banking platform, built from the ground up together with UK-based tech start-up 10x Banking, and integrates more than 30 different technology services.

MacRae has had a long association with Westpac, having worked with the bank previously for 12 years from 2003 in several senior roles across mortgages, retail and SME and premium banking. He rejoined in June 2021, after a six-year stint with InvoCare and Experian.

He will retain his current role as managing director of Westpac's Pacific Bank and Specialist Finance.

MacRae's appointment follows a string of senior hires for the BaaS team, including Christopher Gale as chief commercial officer, Nicole Druce as head of technology and Chris Baker as head of product.

Zein Malhas has joined **Blink**, a new digital bank in Jordan launched by Capital Bank of Jordan, as its CEO.

Malhas spent nearly four years in various senior roles at Capital Bank of Jordan, most recently as chief digital officer.

Previously, she worked at Standard Chartered and Housing Bank for Trade and Finance.

For its technology, Blink uses Codebase Technologies' Digibanc platform. The vendor says the challenger bank incorporates "an innovative UI system based almost exclusively on swiping – similar to how millennials and Gen Z-ers interact with social media – the first of its kind for a neobank".

Tide's UK CEO **Laurence Krieger** has stepped down after five years with the UK-based SME banking services provider.

Krieger joined Tide in early 2017 as chief operating officer (COO) and added the chief product officer responsibilities the following year. He became the company's UK CEO in January 2021. Prior to that, Krieger was COO of Revolut.

Krieger says he will continue to be "fully engaged" in the fintech space.

A Tide spokesperson says Krieger "has sadly left Tide having decided to take some time to rebuild his health after a serious illness". The process is underway to recruit a new UK CEO.

Capitec Bank, one of the largest retail banks in South Africa, has appointed a new chief technology officer (CTO), **Andrew Baker**.

Baker spent a decade with Barclays Africa Group as chief information officer (CIO) and CTO, and then nearly four years at the banking group's successor, Absa Group, as CTO.

Following that, he had a brief five-month stint at AWS as director of engineering, Amazon Elastic Compute Cloud.

Capitec has 14.7 million clients, a network of 850 branches and more than 14,000 employees.

Fronted, a UK start-up that provides credit to help renters afford deposits up front, has promoted lead software engineer **Jonathan Kim** to the role of CTO.

Now former Fronted CTO **Simon Vans-Colina**, who founded the company with Jamie Campbell and Anthony Mann in 2019, is moving to Singapore, where he will join another fintech start-up, **BigPay**.

Vans-Colina says he has joined BigPay to build "an inclusive financial system" that rivals what's available from Nubank, Wise, Monzo, Cashapp or Revolut for the billions of people that live in APAC. Vans-Colina was part of the initial team that built UK challenger bank Monzo.

Aniruddha Paul, chief data officer at **ING**, has announced his departure after 15 years with the banking group.

Paul was appointed chief data officer at the Dutch bank in October 2019. Prior to that he was CIO of ING Australia for nearly three years.

Before that he had a nine-year tenure at ING Vysya Bank, the Indian subsidiary of ING (now part of Kotak Mahindra Bank).

"And riffing off our Orange Code, I'm ever so unhesitating in saying that this institution has enabled me to be a step ahead in life and in business. To do my thing in spades, even while doing the corporate thing," Paul wrote on LinkedIn.

Global fintech **Revolut** has appointed **Ibrahim Dusi** as its chief risk officer (CRO) for Americas.

Dusi joins Revolut from US-based lender Happy Money, where he spent eight years, most recently as chief risk and revenue officer. Previously, he had a decade-long tenure at banking heavyweight Capital One in senior leadership roles across its instalment lending, credit card and retail banking divisions.

Revolut's regional presence comprises the US, Mexico and Brazil. Although it exited Canada last year, the fintech indicates it's looking to enter other countries in North and South America.

VALUATION

Cartoon by Ian Foley

In January, the Nasdaq Composite Index corrected by around 13% from its recent all-time high in November, putting the tech-heavy index in market correction territory. However, this has not stopped the pace of new venture investments and many start-ups are seeing valuations that seem to defy the gravity of their unit economics or are in already highly crowded markets (hello there autonomous driving car companies and the nth crypto exchange).

Some of the reasons for this are the general lag between the two markets, but also many companies raised mammoth rounds with only a few investors, which means they do not need – or want – to go back out to raise more capital and likely see a down round.

Companies outside this charmed circle will likely see more downward pressure on pricing in later stage rounds in the next couple of months.

EDITORIAL
Managing Director & Editor-in-Chief
Tanya.Andreasyan@fintechfutures.com

Editor
Paul.Hindle@fintechfutures.com

Reporter
Alex.Pugh@fintechfutures.com

SALES
Business Development Executive
Sam.Hutton@fintechfutures.com
+44 (0)20 8052 0434

DESIGN & PRODUCTION
West Hill Media
www.west-hill.co.uk

MARKETING
Marketing Manager
Rebecca.Nolan@fintechfutures.com

Marketing Executive
Reece.Leonard@fintechfutures.com

PRINTER
Hobbs the Printers Ltd, Hampshire, UK

ADDRESS
FinTech Futures,
240 Blackfriars Road, London SE1 8BF

ISSN 0266-0865